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SACAJAWEA PROJECT

Sacajawea's shining hour was the return to her people - her homeland. This is the project area.

With uplifted hand she pointed the way to a new land - a promise for the future. Like Sacajawea, this report shows the way to even greater promise by rehabilitation, development, use and conservation of the resource.

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Master Map
Conservation Development Map
Construction Map
Minerals Map

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INTRODUCTION

Project Sacajawea is a specific plan for the accelerated development, use and conservation of 1,500,000 acres of the National Land Reserve located in Southwestern Montana. Detailed consideration is given to the water, forage, timber, wildlife, mineral and recreation resources. The plan sets forth what needs to be done and why, proposes a schedule of accomplishment, outlines the extent of the investment required and considers benefits that will be derived.

The project area has been delineated to include public land resources in Beaverhead County (excluding the Big Hole Valley), Madison County, Broadwater County west of the Missouri River, Jefferson County, Silver Bow County and the southern tip of Deer Lodge County. It contains several mountain ranges separated by broad flat valleys. Two major rivers, the Jefferson and the Madison, together with many lessor streams flow through the area. Higher mountain elevations are timbered, intermediate elevations are combinations of range land and timber, and bottom lands are a combination of hay and cultivated lands. Generally, bottom lands are privately owned, intermediate elevations are National Land Reserve and higher elevations are National Forest.

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Project Beaverhead is a specific plan for the accelerated development, use and conservation of 1,500,000 acres of the National Land Reserve located in Southwestern Montana. Detailed consideration is given to the water, forage, timber, wildlife, mineral and recreation resources. The plan sets forth what needs to be done and why, proposes a schedule of accomplishment, outlines the extent of the investment required and considers benefits that will be derived.

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Selection of this area for accelerated development was based primarily on rehabilitation needs, potential, and dependency of

the local economy on benefits derived through contributions from the National Land Reserve. Examples are: Current annual revenues from timber sales are 10% of potential, livestock and wildlife forage production is about 43% of potential capacity, and studies reveal an estimated 57% of the public land is in only fair condition. Trend estimates indicate 64% of the vegetative resource is static and some 17% is declining. Recreation demand and use is rapidly increasing - Excellent sites exist but facilities are lacking.

Active use of the resources by the white man began in the area with the discovery of gold in 1862. The first livestock operations in Montana began in the project area initially to supply a market created by the influx of miners. Railroads reaching the area in the 1880's expanded the livestock industry to the dominant position it holds today. This area was "open range" and used by increasing numbers of cattle, sheep and horses. Livestock operations in many cases were entirely dependent on the Federal Range for feed.

The Homestead Act and subsequent establishment of the National Forest in the early 1900's brought control to the bottom lands and summer ranges. As a consequence heavier use occurred in areas of intermediate elevation, lands which are now predominately National Land Reserve.

Uncontrolled use of public land continued until passage of the Taylor Grazing Act in 1934. By then fifty years of misuse and over-

use had taken its toll. Damage to the resource was tremendous.

Fortunately the resources can be renewed and developed with proper investments and management. Progress has been made in this direction since 1934, but has largely been dependent on natural recovery. Full development of the potential can be attained only by a systematic, balanced and coordinated investment on a time schedule as set forth in this plan.

II - PRESENT SITUATION

Economy

The economy of the project area is dependent primarily upon the agricultural and mineral industries. Nearly 53% of this total land area is publicly owned. Both the agricultural and the mineral industries rely upon the resources of the National Land Reserve and National Forest and are vitally concerned with public land management programs.

Mining activity is concentrated in the extreme north boundary of the project area. This encompasses some of the most important mining districts in the state. Population density in this mineralized area is 65 persons per square mile, compared to 1.8 persons per square mile in the agricultural based segment. Since the depletion of the easily discovered high grade lodes of gold and silver, metallic mining activity in most districts has been sporadic and shortlived. At the present time the Anaconda Company operations at Butte and Anaconda are by far the most important. Silver Bow County accounts for about 99% of the State total output for gold, silver, copper, lead and zinc ore, and about 95% of the State total value of these metals. Illustration 1 graphically portrays their dollar value for the years 1935 to 1960.

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Phosphate and talc are two of the more important, showing significant increase in production in the last few years.

The agricultural segment of the economy is based upon diversified production of sheep, cattle, small grains, hay, and potatoes, with heaviest emphasis on livestock production. However, this income is subject to wide yearly fluctuation due to periods of prolonged drought and periodically unfavorable market prices.

The project area itself is not quite up to average in a Statewide comparison of per capita incomes. The counties involved rank as follows in relation to the 56 counties in the State:

County	Rating
Beaverhead	18
Broadwater	38
Jefferson	40
Madison	51
Silver Bow	12*

*Mineral based

The per capita income in Montana has suffered a decline in rank in the nation from 16th place in 1950 to 28th place in 1960. The agricultural segment of the economy is based heavily upon the livestock industry. Only 4.5% of the total project area is harvested crop land. Livestock and associated products accounted for 90% of the total farm marketings in the project area in 1959.

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Land Status

The remaining National Land Reserve is not suited for intensive cropping use and, under present and foreseeable policies and legislation, will generally remain in federal ownership. However, due to varying degrees of fragmentation in the land pattern, the national land reserve is almost impossible to administer for many types of public use and even in places is difficult to administer for grazing use. Without significantly diminishing the total acreage of public land in the project, much needs to be done to build a land base which will support intensive management programs for all of the resources existing in this area, including general public use for hunting and other forms of extensive recreation.

Range and Wildlife

Adjudication of the grazing district lands is basically completed but lack of range facilities, fences and water developments, and land treatment is delaying efforts to bring about intense management. Staffing limitations have prevented development of management plans and use supervision is at a bare minimum.

Lands now included in the Section 15 area have all the atributes necessary for intense management. However, past program levels have allowed little attention to be devoted to management beyond the administrative renewal of leases. There is a continuing tendency for these lands to shift from one operator to another at the termination

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of leases. Range inventories and facilities are inadequate. Land treatment and management plans are lacking.

Fingers of National Forest protruding into the National Land Reserve are creating another problem in bringing about proper use. For example, fences are now located on boundaries between land administered by this agency and the Forest Service. Under these conditions livestock use up to higher elevations cannot progress with range readiness dates and over use is occurring on the National Land Reserve below these illogically located control fences.

Studies over a period of years, Illustration 2, indicate that the present condition of the range is as follows:

Poor Condition	4.2%
Fair Condition	57.7%
Good Condition	38.7%
Excellent Condition	1.4%

Other studies indicate the following range trends:

Improving	19.0%
Static	64.0%
Declining	17.0%

Sagebrush now predominates vast acres within the project area thus restricting the range from reaching its maximum potential. Studies conducted and research collected indicates that the range lands are only

producing 43% of the potential capacity available for livestock and wildlife. See Illustration 3.

Of significance at the present time is the forage situation with respect to existing available AUM's for wildlife. Section 3 lands within the project area are unable to support the present game populations for any period greater than three months. On the Section 15 lands the same situation is present.

Fire Presuppression

The present fire situation is best expressed by a study of fires in the area during the 1951 - 1961 period.

Incidence and cause for the 11 year period:

Cause	Number	Percent of Total
Lightning	82	53
Smokers	19	12
Camp fires	11	7
Debris burning	14	9
Children	3	2
Prospector	3	2
Railroad	4	3
Incendiary	3	2
Hunter-fisherman	3	2
Miscellaneous	12	8
	154	100

Size of fires for 11 year period:

Size	Number	Percent of Total
Class A (0-¼A.)	62	40
Class B (¼-10A)	47	31
Class C (10-100A)	29	19
Class D (100-300A)	6	4
Class E (300A.+)	10	6
	154	100

Average number of reportable fires per year - 14

Average annual burn of all ownerships - - 959 acres

The problem here is that the elapsed time between the time a fire starts until it is suppressed is currently too great. Reliance must now be placed on inadequate fire weather reporting, inadequate detection system, inadequate communication system, inadequate access and an inadequate suppression force. In addition, the educational program is limited by other priority needs.

Rehabilitation, Improvement and Conservation of Soil and Moisture

Excessive use and misuse prior to 1934 took its toll on the surface resource as related to the vegetation and the soil. Actually several years passed subsequent to 1934 before any degree of use control could be effected. Basically misuse and over use has been stopped; but the task of improvement remains to be accomplished.

In terms of improving the vegetative cover for purposes of improving both the quantity and quality together with soil stabilization, current program levels allow an average of 1,500 acres to be improved each year by spraying or plowing and seeding sagebrush land. At this rate of progress it will take 110 years to treat the 165,500 acres of sagebrush suitable for treatment.

In considering vegetative quantity and quality improvement, the Soil Conservation Service in cooperation with the Bureau of Land Management

made clipping studies in 1961 on the Cross Range Aerial Spray Sagebrush Project. These studies revealed that on the untreated area, the usable forage totaled 80 pounds per acre. After treatment and two years deferment, the usable forage was increased to 1,070 pounds per acre. Of significant importance with respect to wildlife is the fact that sagebrush, (a critical winter deer forage), produced 350 pounds per acre before treatment and after treatment, it was producing 170 pounds per acre. This resulted in the increase of usable forage by 1,300% while only reducing the sagebrush to 48.5%. The grazing capacity increased from 6.4 acres per AUM to 2.8 acres per AUM. The significance of these figures point out the tremendous potential of the lands within the project area. See Illustration 4 and 5.

Estimates from the Public Range Land Appraisal Study and the Beaverhead County Conservation Needs Inventory indicate that erosion varies from moderate to severe in the area needing treatment. Both wind and water erosion is apparent. Pedestaling, erosion pavement, and movement of soil and debris movement is evident throughout the area. Technicians estimate top soil losses currently range between one and two inches. The abundance of sagebrush in competition with soil stabilizing vegetation provides a poor environment for rapid natural recovery. A sagebrush plant utilizes approximately five times its weight in water in a year.

Currently the construction of fences and water development is only partially completed. In some instances common allotments still

exist, cross fencing of allotments is nonexistent and development of stock water is lacking in many areas. Ineffective distribution of current use is not only a deterrent to optimum forage production but also to natural stabilization of the soil.

Reduction of erosion by control of water has not been undertaken in this area because of higher priority needs elsewhere in Montana. Gully erosion and head cutting are evident in most drainages. Data is not available, but it is obvious that silt loads are considerable during periods of heavy run off. Sparce vegetation in many areas, and absence of drainage control structures cause increased run off. Uncontrolled flooding causes irreparable damage.

Timber

There are 190,000 acres of commercial forest lands within the project boundary. We anticipate that an additional 102,000 acres will be added when National Forest Boundary adjustments are consummated.

As in other programs, land status problems exist with respect to forest management. The intermingling of public lands and National forest in the Lima and Centennial areas currently prevent establishment of logical management divisions. These problems can be eliminated by National Forest boundary adjustments.

The inventory, which is paramount to the establishment of management plans, is in the initial phase. The basic office planning has been

accomplished, while the field work, the establishment of permanent inventory sample plots, has just begun. At the present rate of accomplishment, two years would be required to complete the task. The current annual revenue is only 10% of the potential. Lack of access and assurance that timber will consistently be made available on a long term basis has prevented the industry from making investments in the area. An intensified timber management program can raise the revenues to the potential shown on Illustration 7.

Intensive timber management and area development can increase the timber cut from the current 2 million board feet to an estimated 14 million. The existing access roads are only 6% of the estimated requirement.

Forest development funds have not been available and progress at the present time is static. No reforestation, stand improvement, or site preparation has been accomplished.

Forest Protection

The fire problems here are identical to those outlined under fire presuppression with the exception that adequate control of timber sale contracts is being maintained to prevent any serious slash problem.

A program of forest insect and disease protection is just beginning. The area is heavily infested with spruce budworm, 21,177 acres of

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A program of forest insect and disease protection is just beginning. The area is heavily infested with spruce budworm, 21,177 acres of

which have been treated. This represents 25% of the area in need of treatment.

The major area of untreated infestation adjoins the Red Rock Lakes Wildlife Refuge. Currently insecticides are used to control spruce budworm. Controversy on the effect of insecticides on wildlife may require a special interagency study.

Recreation

The recreation inventory indicates fifty potential recreation sites in the project area. Eight sites involving approximately 2,500 acres are critically in need of development. An estimated 55,000 people now use the area for recreational purposes. See Illustration 8.

Priority sites on the Madison and Big Hole Rivers and Ruby Reservoir where access is available, are currently used by increasing numbers of people for fishing and camping. Other priority sites are blocked by private ownership or non-existence of access roads. Posting of privately owned lands is increasing in proportion to increased use of public land.

Accessible sites are becoming unsightly with litter inadvertently scattered by users. Sanitation is becoming a problem. Isolated shade trees are being destroyed and the destruction of the resources is threatened by the indiscriminate use of campfires.

Transfer and lease of public lands to local and state governments under provisions of the Recreation and Public Purposes Act has not been utilized to any degree, and it is not expected to increase to any appreciable amount. Local and State governments do not have the means nor inclination to assume full development responsibility, and since use of sites such as the Madison River is nationwide, this feeling is understandable.

In summary, the sites are available, the use is present and increasing, and facilities are non-existent.

Cadastral

The identification of property boundaries is basic in developing and managing the resources of the National Land Reserve. On some 630,000 acres monumentation was accomplished 50 to 100 years ago and natural materials were used to identify the lands. Such monumentation is now in a badly deteriorated condition, compounding the problems of management.

Areas suitable for recreational and small tract development are currently unsurveyed.

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III OVERALL PROJECT NEEDS

Lands

The Beaverhead County Master Unit analysis emphasizes the following needs:

(a) Land exchanges (state and private) to consolidate the land pattern.

(b) National Forest boundary adjustments.

(c) Withdrawal review and adjustment.

(d) Sale of isolated tracts not required for public purposes.

Land Exchanges are urgently needed to present a more consolidated land pattern. The present pattern, with a few exceptions, will not permit the encouragement of general public use since the intermingled private lands would be constantly subjected to trespass. Any type of extensive watershed treatment is difficult to plan and justify by either the federal government or other land owners, since often neither controls a sufficient contiguous land area to warrant the investment necessary. Often only a few vital key development sites are missing.

National Forest boundary adjustments and review of existing withdrawals is needed to simplify excessively complex intermingling of authority and programs by several federal agencies. The present arrangement grew piecemeal to meet problems which often no longer exist. Much needs to be done to bring order to the present situation.

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Finally, after all needed resource management programs are identified, and all possible public needs are met, there will be isolated instances of surplus lands which are qualified for sale under the public sale law. These lands should be sold as rapidly as they are identified in order that the Bureau's efforts can be concentrated on lands which will remain under federal ownership.

Decentralization of the lands and recreation function to the district offices will be completed before the start of the project period. This action will enhance the coordination of the lands program with the various resource management activities. Staffing needs include one Chief of the Lands Field Group, two Journeyman Land Examiners, and one Clerk-Stenographer. This group will be complemented by the Lands Specialist staff in the State Office.

Range and Wildlife

Needs are in three major categories:

1. To consolidate the management of the resource under a single type of administration.

   A. Extension of grazing district boundaries to include Section 15 area.

   B. Consummate National Forest Boundary adjustments.

2. To complete use adjudication and establish intense management.

3. To develop potential through land treatment and range facilities.

Increased intensity in the lands program will be necessary to consummate the first category.

Increased activity in the range administration program is

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Increased activity in the range administration program is

necessary to meet the needs of the second category.

Increased activity is required in the rehabilitation, improvement and conservation program is necessary to meet the needs of the third category.

Specifics of the needs of the range administration program are treated below under each program feature.

1. Resource Survey

   The present resource survey of the area is 10 years old and the remaining grazing privilege adjudication workload will require a recheck. Rechecks will be made on 684,000 acres to permit adjudication of the Section 15 area when included in grazing district boundaries. This acreage also includes inventories of National Forest areas where boundary adjustments are proposed for more efficient and logical management. Full accomplishment will require 2½ man years.

2. Dependent Property Surveys and Range Adjudication

   As a result of the administrative consolidation outlined above, it will be necessary to complete 325 dependent property surveys followed by adjudication and issuance of term permits. Accomplishment is mandatory to provide a firm basis for intensive management. It is estimated that 37.5 man months will be necessary to complete this requirement over a five year period.

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3. Range Use Supervision

As completion of the adjudication phase of the management program materializes, the emphasis will be shifted to allotment analysis, establishment of unit management plans, and increased trespass control.

It is in this area that intense management can be brought about. It is paramount that other phases be completed quickly to allow early establishment of sound intensified management practices such as rest - rotational grazing.

An estimated 89 man months is needed to effect the above during the five year period.

4. Range Use Adjustment

This phase is an integral part of bringing about intensified management. Use adjustments generally will be conducted in conjunction with allotment analyzation and development of management plans.

An estimated 39 man months will be needed for this work during the project period.

5. Wildlife Management

Current needs lie in the area of bringing about a proper relationship between wildlife and the habitat. Through improvement of forage conditions increased forage will be available to livestock and wildlife alike. Development of

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access is needed to open up areas of wildlife concentrations for harvest purposes. Considerable conflict exists between range users and sportsmen. A continuous public relations and education program is needed to bring multiple use into balance.

Some 10 man months of work is needed during the five year period to bring about the goals related to wildlife management.

6. Range Studies

Under present program levels only minimum studies are now being accomplished. The necessity for an increase in both amount and type of studies conducted is again paramount to achievement of the program goal. Studies form the basis for successful and progressive management decisions.

As the range inventory requirements are met in the first 2½ years, the emphasis will shift to this phase. Sixty-seven man months will be required to establish and study actual use pastures, browse transects and study plots.

7. Cooperative Research

Other agencies and institutions are embarked on research projects directly related to better management of the National Land Reserve. To assure the availability of such information correlated with specific management problems, active participation in such projects is needed. An estimated $5,545.00 is necessary to further this objective.

8. Grazing Lease Administration

With the land adjustments recommended in this project program, only 61,990 acres will remain as Section 15 lands. Within this total acreage, there are 170 leases remaining. The needs required to fulfill the administration requirements of these lands was established at 11 man months per year for the total program period.

Fire Presuppression

First priority need is to reduce the annual acreage destroyed by fire. This can be accomplished in two ways; reduce fire incidence and reduce individual fire size.

To accomplish this objective there is need to attack this problem with the following 6 point program:

1. Educational Program

By keeping before the public the need for caution, the danger to life and limb and the tremendous losses involved, the number of fires caused by other than lightning can be reduced.

2. Fire weather data

Development of additional data representative of the protection area is necessary to coordinate readiness preparations. At least one additional fire weather station is needed.

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3. Detection

Detection needs include

a. - Additional per diem guards

b - Establishment of a lookout station

c - Increased patrols, both ground and air

4. Facilities and equipment

Needs in this category include:

a - Additional fire caches to equip per diem guards

b - One additional radio repeater station to expand communication coverage

c - Establishment of a bentonite slurry mixing plant

5. Fire Breaks and Fire Trails

42 miles of fire breaks and trails are needed in 6 different locations

6. Attack Forces

Sufficient fire suppression funds are needed to engage one full time permanent employee and further, to finance activation crews from presuppression rather than suppression accounts.

Based on actual experience the fire danger rating index system has not been a reliable index to fire incidence. Therefore, there is need to establish a permanent force readily available for fire suppression throughout the summer months.

3. Detection

Detection needs include:

a. - Additional per diem guards

b - Establishment of a lookout station

c - Increased patrols, both ground and air

4. Facilities and equipment

Needs in this category include:

a - Additional fire caches to equip per diem guards

b - One additional radio repeater station to expand communication coverage

c - Establishment of a bentonite slurry mixing plant

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Rehabilitation, Improvement and Conservation

Water control structures, watering facilities, land treatment practices, and fencing in the past have proven to be a prime requisite in proper management of the National Land Reserve. Results from accomplishment so far are outstanding, but current progress cannot keep pace with the demands of intensive management over extensive areas. An upward trend must be developed now on the range which is presently in a static trend. The majority of the range in fair condition must be improved to the good condition class. The existing cover of vegetation is inadequate to check accelerated soil erosion and rapid surface runoff in these areas.

The developments necessary to fulfill the present needs include the construction of 20 control structures and 220 debris basins to retard surface flow and assist in the stabilization of the soils. Other soil stabilizing practices are needed, including contour furrowing, brush control and seeding of 165,500 acres. To improve livestock distribution, 175 developed watering facilities are necessary in addition to 400 miles of fencing. Program facilities needed include 85 stock guards. Additional complementary developments in the National Forest Adjustment area include contour furrowing, sagebrush control, 50 watering facilities, 130 miles of fence and 60 debris basins.

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Forest Management and Development

Intensive management of the timber resource is the objective of this program.

A thorough inventory and sound management plan is needed for each timbered area. A definite plan for mature timber cuttings, sanitation cuttings, thinnings, prunings and restocking is required to develop the timber potential within the project areas.

Full development of each forest management area is dependent on construction of mainline and spur roads. Eight mainline access roads totaling 91 miles are needed immediately in the project area. With this access road program intensive timber management can begin.

Presently the access problem is critical. Most timbered areas are inaccessible. An energetic program of easement acquisition must be accomplished before road development can occur.

As the program expands the need to keep the forest industry abreast of progress is paramount. Industry expansion must keep pace as timber availability increases if full benefit is to be realized.

In order to further develop timbered areas, it is estimated that 700 acres need thinning, 600 acres need site preparation, and surveys are required on 14,000 acres to determine reforestation needs. At this time, it is estimated that 5,200 acres require reforestation.

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Forest Protection

Needs in this category concern expansion of forest insect and disease protection. As outlined earlier in this report, only 25% of the acreage currently infested in varying degrees with spruce budworm has been treated. An estimated 29,000 acres is critically in need of treatment now.

Unfortunately it is not just a matter of treatment. Due to the location of this area, a problem exists to develop a plan which will not be detrimental to wildlife in the adjacent Red Rocks Refuge. An immediate study of all the related factors is planned to develop a closely coordinated solution to this problem.

Recreation

The primary recreational needs for the utilization of our public lands are two-fold. First, an active development program is necessary to satisfy the existing recreational demand on the public lands. To accomplish this, the following program must be achieved for each potential site:

1) Cadastral Survey
2) Development of Topographic Maps
3) Preparation of Site Plans
4) Acquisition of Right-of-Ways
5) Survey and Design of Roads and Facilities

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6) Construction of Road and Facilities

7) Site Maintenance

8) Site Management

The development of eight recreation areas during the project period is necessary to supply recreational facilities equal to the estimated demand.

The second requirement is the preparation of an overall recreation plan which will enable implementation of a continuous action program following the completion of the project period. This plan will enable recreation development to proceed on a current basis as dictated by the demand at the time. To accomplish this goal, the recreation inventory must be completed, site plans developed, and in general, all the necessary pre-development activities completed. Construction will follow when needed.

One Recreation Specialist will be required to meet these goals.

Cadastral Survey:

To achieve full resource utilization, a total of 76,000 acres of original surveys, 630,000 acres of resurveys and 71,000 acres of subdivisions and small tract surveys are required in the project area. Dependent resurveys are not planned for those areas where the pattern of intermingled lands shows only a scattering of public lands. The badly deteriorating monumentation, completed from 50 to almost 100

6) Construction of Road and Facilities

7) Site Maintenance

8) Site Management

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years ago, is of materials such as native rocks, posts, and pits and mounds. Remonumentation with permanent, easily identified markers are required throughout the project area.

Subdivision surveys are needed in recreation and small tract areas.

The original surveys to be accomplished fall principally in those areas now managed by the Forest Service, under consideration for land adjustment with this Bureau. Whether or not the adjustment is consummated will not affect the urgent need for this work as a basis for proper planning and full utilization and management of the natural resources.

Minerals

At the present time there does not exist, in a single source, a detailed and comprehensive inventory of both the metallic and non-metallic mineral resources. Such an inventory, available to all federal, state, and private interest, would do much toward promoting exploration and exploitation of these resources.

Since much of the work on a minerals inventory for the project area already has been completed under the Master Unit System, the Bureau should continue this work for the benefit of both the Master Unit System and the Sacajawea Project. It is equally important that the inventory not be allowed to become obsolete. Continued work should be expended on this inventory to keep it current and up-to-date in the years following completion of this project.

IV

BENEFITS

SACAJAWEA PROJECT

DIRECT

INDIRECT

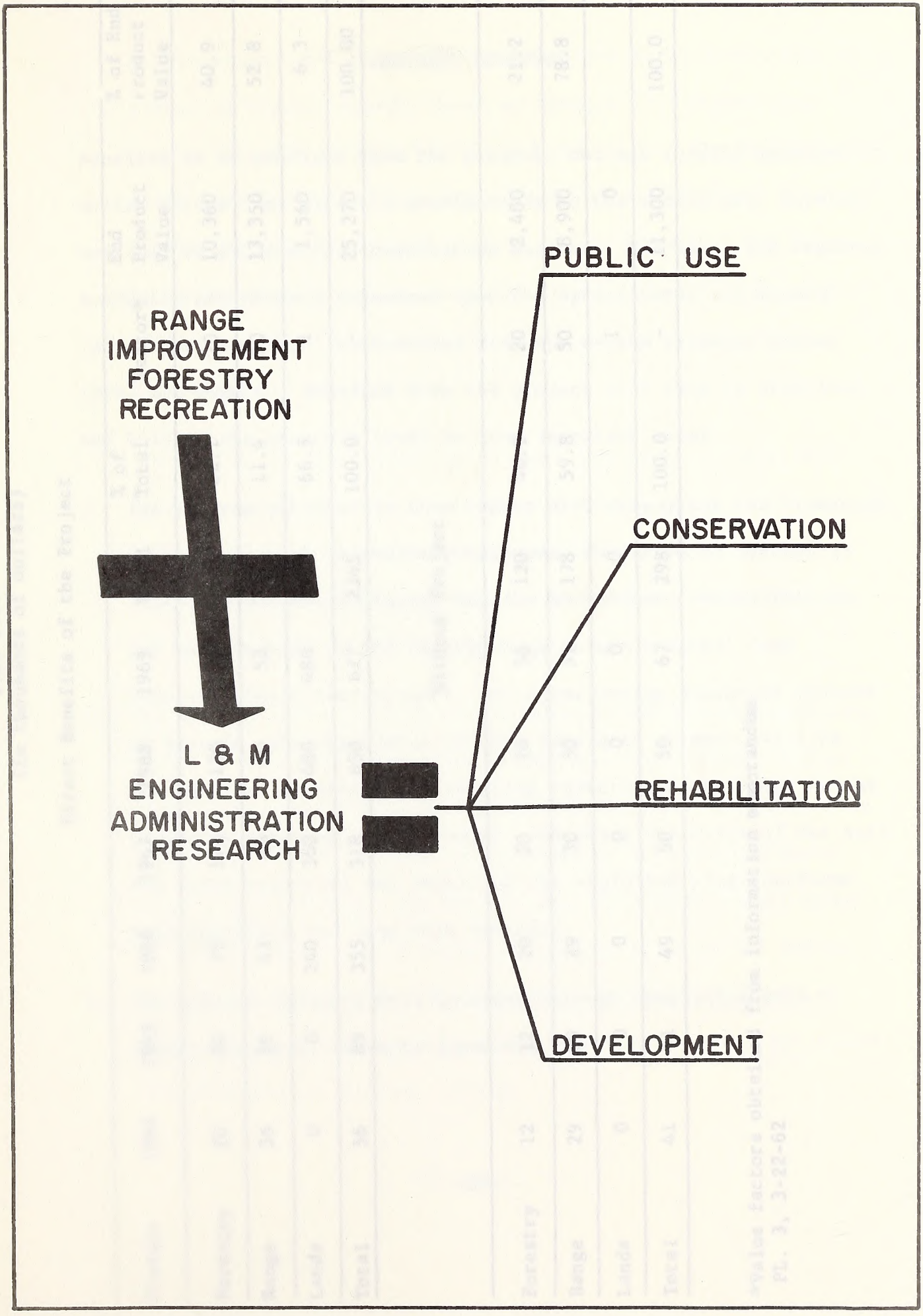
IV

BENEFITS

SACAJAWEA PROJECT

DIRECT

INDIRECT


PUBLIC USE
RANGE
IMPROVEMENT
FORESTRY
RECREATION
CONSERVATION
L & M
ENGINEERING
ADMINISTRATION
RESEARCH
REHABILITATION
DEVELOPMENT

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RANGE
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FORESTRY
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CONSERVATION
L & M
ENGINEERING
ADMINISTRATION
RESEARCH
REHABILITATION
DEVELOPMENT

By Major Functions
Program for the Public Lands
1964-1969
(in thousands of dollars)

Direct Benefits of the Project

Product	1964	1965	1966	1967	1968	1969	Total	% of Total	Factor*	End Product Value	% of End Product Value
Forestry	20	50	72	112	120	144	518	22.1	20	10,360	40.9
Range	36	39	43	46	50	53	267	11.4	50	13,350	52.8
Lands	0	0	240	360	480	480	1560	66.5	1	1,560	6.3
Total	56	89	355	518	650	677	2345	100.0	-	25,270	100.00

Without Project

Forestry	12	12	20	20	20	36	120	40.2	20	2,400	21.2
Range	29	29	29	30	30	31	178	59.8	50	8,900	78.8
Lands	0	0	0	0	0	0	0		1	0	
Total	41	41	49	50	50	67	298	100.0	-	11,300	100.0

*Value factors obtained from information memorandum
PL. 3, 3-22-62

Estimated Sale, Fee and End Product Value
By Major Functions
Program for the Public Lands
1984-1989
(in thousands of dollars)

Direct Benefits of the Project

Product	1984	1985	1986	1987	1988	1989	Total	% of Total	Factor*	End Product Value	% of End Product Value
Forestry	20	50	72	112	120	144	518	22.1	20	10,360	40.9
Range	36	39	43	46	50	53	267	11.4	50	13,350	52.8
Lands	0	0	240	360	480	480	1560	66.5	1	1,560	6.3
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Total	41	41	49	50	50	67	298	100.0	-	11,300	100.0

Without Project

*Value factors obtained from information memorandum

INDIRECT BENEFITS

Benefits to be realized from the project, but not readily measured in dollar values, are directly attributable to the public use, development and rehabilitation-conservation aspects. The local and regional economics are closely dependent upon the agricultural and mineral industries, and high fluctuations from the medium personal income level are common. Benefits from the project will tend to stabilize and bolster the economic level by four important means.

1. The program outlined in this report will strengthen the livestock industry through intensive management, inclusion of Section 15 lands, adjustment of Forest Service boundaries, rehabilitation and conservation of the native range on the national land reserve. See Illustration 6. Distress during prolonged periods of drought, characteristic of this semi-arid climate, will be modified by increasing the carrying capacity of the range and by providing dependable stock water. Checking the waste of the soil and water resources and repair of the exploited range produces both immediate and long term benefits.

2. The mineral industry will be aided through completion of a detailed mineral resource inventory.

The benefits of the minerals inventory are intangible since it cannot be leased, rented, sold, or managed in a manner that can be measured in terms of dollars and cents. The most immediate benefits to the Government would be considerably improved mineral classification and mineral patent actions. The accuracy and speed of classifications in connection with applications and Bureau motion will work to the advantage of both the Government and the public.

The public, if this inventory is made available to them, can locate quickly and accurately areas favorable to prospecting and exploration operations. In other instances they could determine in advance of application if lands in which they are interested might be subject to mineral conflict.

3. The project will cultivate a fast-growing recreation enterprise which is not directly related to the perils of climate and unstable prices at the market place. The economic impact that an active recreation program, as outlined in this report, would have is significant. The project area is located in the heart of some of the finest hunting and fishing areas in our nation. This recreational resource alone draws literally hundreds of thousands of people annually whose intent is to seek, for a time, the pleasures of outdoor living.

The initial phase of construction and maintenance of recreational areas will immediately bolster the economy. The off-site benefits that flow into the urban communities (motels, restaurants, service stations, sport shops, etc.) will follow the construction stage. Increased tourist spending will continue to rise after the five-year project period. Based on projected visitation figures and average daily tourist expenditures in the project area, it is estimated that by 1976 and 2000, $1,200,000 and $10,500,000 respectively will be spent by tourists as a result of the Bureau's recreational development. See Illustration 9.

Not to be minimized are the intangible benefits - the physical, cultural and spiritual amenities derived from the development of outdoor recreation facilities.

4. The program will activate the local and regional timber industries by an accelerated forest development program on the public lands. Inventories permitting long-range development of all forest resources - timber, water, wildlife, recreation - are essential to the propogation of existing and prospective industries.

Nearly 13 million board feet of timber will be harvested within the next 6 years as a result of the project. It is estimated

that this amount will provide over 250 primary and secondary jobs providing an annual payroll of over $1.25 million in local communities; over $400,000 of direct revenue from sale timber and approximately $8 million of gross national product.

Access roads constructed for timber management and protection purposes will also enhance the controlled harvest of big game animals, provide additional travel paths for recreationists and may encourage minerals prospecting.

V - PROJECT COSTS

Presented in this part is a summarization of estimated costs needed to complete this project.

The following project cost analysis is a presentation of costs for the first year, the five year total and amount required beyond the five year period for each major activity. To supplement this information a listing of development work by type and cost to be undertaken in the Fire Presuppression, Rehabilitation Improvement, and Conservation of Soil and Moisture, and Construction Programs is also provided.

Personnel requirements are outlined in the organizational chart.

To differentiate between accomplishments on lands which are now National Land Reserve and lands now National Forest which require boundary adjustments, a designation of "B" has been used for the latter on both the maps and Form 4-1659, Project Schedule.

PROJECT COST ANALYSIS

PROJECT FEATURE	INITIAL YEAR TOTAL COST	FIVE YEAR TOTAL COST	TOTAL REMAINING TO BE ACCOMPLISHED	GRAND TOTAL
RANGE MANAGEMENT & PROTECTION				
Grazing Administration	$ 108,000	$ 338,000	--	$ 338,000
Fire Presuppression	45,000	135,000	--	135,000
TOTAL	$ 153,000	$ 473,000		$ 473,000
REHABILITATION IMPROVEMENT AND CONSERVATION OF SOIL MOISTURE				
Soil & Moisture Conservation	$ 444,000	$ 3,025,000	--	$ 3,025,000
Weed Control	--	--	--	--
Range Improvements	8,000*	40,000*	--	40,000*
TOTAL	$ 452,000	$ 3,065,000		$ 3,065,000
FOREST MANAGEMENT, DEVELOPMENT AND PROTECTION				
Forest Management	$ 93,000	$ 419,000	--	$ 419,000
Forest Development	31,000	342,000	--	342,000
Forest Protection	17,000	17,000	--	17,000
TOTAL	$ 141,000	$ 778,000		$ 778,000
CADASTRAL SURVEY				
Cadastral Survey	$ 66,000	$ 983,000		$ 983,000
LANDS & MINERALS MANAGEMENT AND RECREATION PLANNING				
Lands	$ 76,000	$ 325,000	--	$ 325,000
Minerals	4,000	15,000	--	15,000
TOTAL	$ 80,000	$ 340,000		$ 340,000

PROJECT COST ANALYSIS

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Cadastral Survey	$ 66,000	$ 983,000		$ 983,000
LANDS & MINERALS MANAGEMENT AND RECREATION PLANNING				
Lands	$ 76,000	$ 325,000	--	$ 325,000
Minerals	4,000	15,000	--	15,000
TOTAL	$ 80,000	$ 340,000		$ 340,000

PROJECT COST ANALYSIS

PROJECT FEATURE	INITIAL YEAR TOTAL COST	FIVE YEAR TOTAL COST	TOTAL REMAINING TO BE ACCOMPLISHED	GRAND TOTAL
CONSTRUCTION & MAINTENANCE OF ROADS BUILDING & RECREATION FACILITIES				
Construction, Roads	$ 78,000	$2,401,000	$ 55,000**	$2,401,000
Construction, Buildings	120,000	142,000		142,000
Construction, Recreation Facilities	28,000	357,000		357,000
TOTAL	$ 236,000	$2,900,000		$2,900,000
MAINTENANCE				
Maintenance of Roads	1,000	86,000	--	86,000
Maintenance of Buildings	4,000	20,000	--	20,000
Maintenance of Recreation Facilities	8,000	102,000	--	102,000
TOTAL	13,000	208,000		208,000
GENERAL ADMINISTRATION				
General Administration	34,000	175,000		175,000
TOTAL BY APPROPRIATION				
ML&R	1,175,000	6,022,000		6,022,000
Construction	236,000	2,900,000	55,000**	2,900,000
O&C Grant Lands				
Range Improvements	8,000	40,000	--	40,000
TOTAL	$1,419,00	$8,962,000	$ 55,000**	$8,962,000
PROJECT GRAND TOTAL				$ 8,962,000.00

* R.I. costs included in total Soil and Moisture Conservation Program
** Cost [redacted] included in Project total

PROJECT COST ANALYSIS

PROJECT FEATURE	INITIAL YEAR TOTAL COST	FIVE YEAR TOTAL COST	TOTAL REMAINING TO BE ACCOMPLISHED	GRAND TOTAL
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Construction, Recreation Facilities	236,000	357,000		357,000
	$ 236,000	$2,900,000		$2,900,000
MAINTENANCE				
Maintenance of Roads	1,000	85,000	--	85,000
Maintenance of Buildings	4,000	20,000	--	20,000
Maintenance of Recreation Facilities	8,000	102,000	--	102,000
TOTAL	13,000	208,000		208,000
GENERAL ADMINISTRATION				
General Administration	34,000	175,000		175,000
TOTAL BY APPROPRIATION				
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Range Improvements				
TOTAL	$1,419,00	$8,962,000	$ 55,000**	$8,962,000

PROJECT GRAND TOTAL -- -- --

FIRE PRESUPPRESSION

SCHEDULE FOR DEVELOPMENT OF JEEP TRUCK TRAILS (FIRE BREAKS)

Prickly Pear FMA		
1965-1.	8 miles of trail connecting the Muskrat Creek access road to Galconda Creek and an extension up Muskrat Creek.	8 mi.
Ruby FMA		
1966-2.	14 miles of trail over summit of Ruby Ridge in Ruby FMA.	14 mi.
McCartney Mt. Block		
1967-3.	7 miles of trail connecting access road to roads in the area.	7 mi.
Lawrence Basin Block		
4.	4 miles of trail connecting the access road to road to the southwest.	4 mi.
Centennial FMA		
1968-5.	3 miles of trail connecting Price & Jones Creek access roads.	3 mi.
6.	6 miles of trail connecting Jones and O'Dell Creek access roads.	6 mi.
	TOTAL MILES	42 mi.
	TOTAL COST	$8,000.00

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Prickly Pear FMA

1965-1. 8 miles of trail connecting the Muskrat Creek access road to Galconda Creek and an extension up Muskrat Creek. 8 mi.

Ruby FMA

1966-2. 14 miles of trail over summit of Ruby Ridge in Ruby FMA. 14 mi.

McCartney Mc. Block

1967-3. 7 miles of trail connecting access road to roads in the area. 7 mi.

Lawrence Basin Block

4. 4 miles of trail connecting the access road to road to the southwest. 4 mi.

Centennial FMA

1968-5. 3 miles of trail connecting Price & Jones Creek access roads. 3 mi.

6. 6 miles of trail connecting Jones and O'Dell Creek access roads. 6 mi.

TOTAL MILES 42 mi.

TOTAL COST $8,000.

REHABILITATION, IMPROVEMENT AND CONSERVATION OF SOIL AND MOISTURE

TYPE AND COST OF DEVELOPMENTS

	Type	Units	Unit Cost		Total
Soil Stablization Practices					
(A)	Brush Control	140,000 acres	$ 4.00/Ac.	$	560,000.00
(B)	" "	19,200 acres	"		76,800.00
(A)	Fencing	398 miles	1,000.00/Mi.		398,000.00
(B)	"	130 miles	"		130,000.00
(A)	Seeding	5,220 acres	9.00/Ac.		46,980.00
(A)	Contour Furrowing	4,720 acres	4.00/Ac.		18,880.00
(B)	" "	3,000 acres	"		12,000.00
(A)	Debris Basins	220 each	1,000.00/ea.		220,000.00
(B)	" "	60 each	"		60,000.00
				(A)	$1,243,860.00
Totals				(B)	278,800.00
				(T)	1,522,660.00
Water Development					
(A)	Stockwater Ponds	118 each	$ 800.00/ea.	$	94,400.00
(A)	Spring Development	55 each	200.00/ea.		11,000.00
(B)	" "	50 each	"		10,000.00
				(A)	$ 105,400.00
Totals				(B)	10,000.00
				(T)	115,400.00
Program Facilities					
(A)	Cattle Guards	50 each	$ 500.00 ea.	$	25,000.00
(B)	" "	35 each	400.00 ea.		14,000.00
				(A)	$ 25,000.00
Totals				(B)	14,000.00
				(T)	39,000.00

REHABILITATION, IMPROVEMENT AND CONSERVATION OF SOIL AND MOISTURE

TYPE AND COST OF DEVELOPMENTS

Type	Units	Unit Cost	Total
Soil Stabilization Practices			
(A) Brush Control	140,000 acres	$ 4.00/Ac.	$ 560,000.00
(B) " "	19,200 acres	"	76,800.00
(A) Fencing	398 miles	1,000.00/Mi.	398,000.00
(B) "	130 miles	"	130,000.00
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(B) " "	3,000 acres	"	12,000.00
(A) Debris Basins	220 each	1,000.00/ea.	220,000.00
(B) " "	60 each	"	60,000.00
(A)			$1,249,860.00
Totals (B)			278,800.00
(T)			1,522,660.00
Water Development			
(A) Stockwater Ponds	118 each	$ 800.00/ea.	$ 94,400.00
(A) Springdev-lopment	55 each	200.00/ea.	11,000.00
(B) "	50 each	"	10,000.00
(A)			$ 105,400.00
Totals (B)			10,000.00
(T)			115,400.00
Program Facilities			
(A) Cattle Guards	50 each	$ 500.00 ea.	$ 25,000.00
(B) " "	35 each	400.00 ea.	14,000.00
(A)			$ 25,000.00
Totals (B)			14,000.00
(T)			39,000.00

WATER CONTROL DEVELOPMENTS

Name	Cost	Cubic Yards
Sagebrush Detention	$ 35,000	64,000
Sagebrush Drop	7,000	13,000
Bannack Ditch Detention	65,000	118,000
Frying Pan Detention	45,000	82,000
Frying Pan Diversion	18,000	33,000
Stage Detention	20,000	38,000
Ermont Detention	40,000	68,000
Rochester Detention	38,000	69,000
Silver Lode Detention	26,000	47,000
Townsite Detention Dam	20,000	45,000
Cherry Hill Detention	20,000	36,000
Parallel Detention	25,000	45,000
Paradox Detention	65,000	115,000
Muddy Creek Detention	76,000	138,000
Cow Camp Detention	40,000	73,000
Shearing Pen Detention	35,000	64,000
Basin Creek Detention	25,000	45,000
Sage Detention	30,000	54,000
Shearing Pen Concrete Drop Structure	26,000	230 (concrete)
Muddy Creek Spreader System	15,000	47,000
Total	$671,000	

SCHEDULE OF CONSTRUCTION AND ACQUISITION OF ACCESS ROADS

201

Fiscal Year	Name	Units And Code	Cost
1964	Price Creek Access Road	1E	2,000
	~~Ruby Mountain Access Road~~	3E	2,000
	Easement Access for T. C.	8E	6,000
	Madison River Recreation Road	1E	1,000
1965	Price Creek Access Road	15G	268,000
	Ruby Mountain Access Road	15G	243,000
	Moose Creek Access Road	2E	1,000
	Jones Creek Access Road	1E	1,000
	Easement Access for T. C.	8E	6,000
	Madison River Recreation Road	10G	70,000
	Ennis Lake Recreation Road	½G	7,000
	Madison Island Camp Rec. Road	¼G	1,000
	Madison River Bridge Recreation Road	1G	6,000
1966	Price Creek Access Road	15S	60,000
	McCartney Mountain Access Road	3E	2,000
	Black Canyon Access Road	3E	2,000
	Moose Creek Access Road	7G	140,000
	Jones Creek Access Road	8G	169,000
	Lawrence Basin Access Road	6P	15,000
	Easement Access for T. C.	8E	6,000
	Madison River Recreation Road	10S	40,000

SCHEDULE FOR CONSTRUCTION AND ACQUISITION CONT'D

Fiscal Year	Name	Code	Cost
1966	Ennis Lake Recreation Road	½S	2,000
	Madison Island Camp Recreation Road	½S	1,000
	Madison River Bridge Recreation Road	1S	4,000
1967	Ruby Res. Camp Ground Recreation Road	½G	2,000
	McCartney Mountain Access Road	7G	108,000
	Black Canyon Access Road	8G	120,000
	Moose Creek Access Road	7S	28,000
	Jones Creek Access Road	8S	32,000
	Lawrence Basin Access Road	17G	213,000
	Odell Creek Timber Access Road	2E	2,000
	Easements Access for T. C.	8E	6,000
	Ruby Res. Camp Ground Road	½S	1,000
	Big Hole River Picnic Site Rec. Road	1G	1,000
	Big Hole River Camp Gr. Rec. Road	1G	3,000
1968	McCartney Mountain Access Road	7S	28,000
	Black Canyon Access Road	8S	32,000
	Lawrence Basin Access Road	17S	66,000
	Odell Creek Access Road	13G	273,000
	Easement Access for T. C.	8E	6,000
	Big Hole River Picnic Site Rec. Road	1S	1,000
	Big Hole River Camp Ground Rec. Road	1S	2,000
	Boulder River Camp Ground Rec. Road	1G	5,000

SCHEDULE FOR CONSTRUCTION AND ACQUISITION CONT'D

Fiscal Year	Name	Code	Cost
Balance			
1969	Odell Creek Timber Access Road	13S	52,000
	Boulder River Camp Ground Rec. Road	1S	3,000

CONSTRUCTION

SCHEDULE OF BUILDING CONSTRUCTION

202

Year	Name	Est. Cost
1964	Land Purchase (5.74 acres)	$ 2,870.00
1964	District Office Building	75,348.00
1964	District Warehouse Building	33,027.00
1964	Carpenter Shop Room	6,600.00
1965	Equipment Storage Shed	4,500.00
1965	Warehouse Chain Link Fence	7,614.00
1965	Warehouse Yard Gravel Surface	6,570.00
1965	Big Sheep Radio Shelter Bldg. & Tower	2,500.00
	TOTAL	$139,029.00

CONSTRUCTION

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1965	Warehouse Yard Gravel Surface	6,570.00
1965	Big Sheep Radio Shelter Bldg. & Tower	2,500.00
	TOTAL	$139,029.00

CONSTRUCTION

SCHEDULE OF RECREATION SITE DEVELOPMENT AND CONSTRUCTION

203

	Name		Cost
1964	Madison River Bridge Recreation Area	2E	$ 8,000.00
1965	Madison River Recreation Area	G	111,000.00
	Ennis Lake Launch Site	G	10,000.00
	Madison Island Camp Ground	G	7,000.00
	Madison River Bridge Area	G	37,000.00
	Ruby Reservoir Camp Ground	1E	1,000.00
1966	Ruby Reservoir Camp Ground	G	36,000.00
1967	Big Hole River Picnic Site	G	7,000.00
	Big Hole River Camp Ground	G	20,000.00
1968	Boulder River Camp Ground	G	12,000.00
	Madison River Bridge Recreation Area	S	37,000.00

VI AN ACTION PROGRAM

Total project program goals recommended are identified in this part as they relate to the initial year, the five year period of the plan, and the remaining period following the five year period.

Range and Wildlife

Total program goals recommended consist of consolidating administration of the resource to a single managerial procedure, under Section 3, Taylor Grazing Act, completing adjudication, coordinating establishment of range improvements and managing intensely on a continuing basis.

During the initial year efforts would be directed toward completing the consolidation of administrative areas under Section 3, concentrating on resource inventories and initiating adjudication of current Section 15 area.

Five year goals recommended to attain the desired level of intense management by the end of the period are to complete resource inventory, dependent property surveys and adjudication, followed by increased use supervision and studies to the degree necessary to achieve this end.

Beyond the five year period the goal recommended is to maintain management at a level of optimum intensity for the good of the resource, the industry and the people.

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Forest Resources

Recommendations for the establishment of goals in Forest Management are as follows:

1. The Forest Inventory be completed by 1965
2. The full allowable cut be offered in 1965
3. Forest rehabilitation be completed by 1965
4. The reforestation backlog be completed by 1970

During the initial year steps would be taken to initiate the inventory and management plan for the project area. This would include new photo flights of all the forest areas and the initial preparation of a Forest Management atlas.

The timber sale program would be accelerated to provide for more saleable materials, thus increasing the revenues. Trespass cases would receive top priority.

A vigorous easement acquisition program would be started to provide the necessary access for timber sale, access road, and recreation programs.

The Forest development activity would be initiated by conducting surveys for stand improvement, site improvement and reforestation.

During the initial year 29,000 acres would be treated for spruce budworm infestation.

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During the initial year 29,000 acres would be treated for spruce budworm infestation.

During the five year period the inventory would be completed and a new allowable cut set for the area with the management atlas providing a working tool for all functions under Forest Management, Development and Protection.

Timber sales would follow a definite cutting plan providing the full allowable cut as described in the above goals. Based on the new inventory data, the cutting plan would follow the recommended adjustment in the allowable cut. Timber trespass would receive top priority.

The easement program would be fully accelerated, providing entry necessary for the development of eight major access roads and facilitate other secondary road systems.

Forest development would be initiated through surveys. This analysis will be completed the second year on BLM lands and the fifth year on National Forest boundary adjustment lands. Reforestation of BLM lands would be completed by end of project period. Reforestation would begin on the adjustment area. A steady program of stand improvement through thinnings and sanitation cuttings would be incorporated after the first year. Some site improvement would be scheduled.

Beyond the five year period the Forest Management program would continue at a level consistent with intense management.

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Rehabilitation Improvement and Conservation of Soil and Moisture

The rehabilitation recommendation is a plan of proven treatments and practices designed to stabilize the soil and reduce surface runoff by improving vegetative cover.

To rapidly improve existing conditions, the following is recommended.

(a) First year: Develop orderly and progressive planning, survey and layout so that rehabilitation developments can proceed on schedule. Developments scheduled for the first year include spraying of 30,000 acres of sagebrush, fencing 50 miles, constructing 50 check dams, and developing 30 watering facilities.

(b) First five years: Planning would be intensive during the first two years, with rehabilitation limited to spraying 59,000 acres of sagebrush, 120 miles of fence construction, 100 check dams, developing 65 watering facilities, and constructing 3 water control features. During the last 3 years emphasis would shift from planning to physical application of treatments and practices. At the end of the five year period the following would be accomplished: Control of 160,000 acres of sagebrush, development of 20 water control features, construction of 530 miles of fence, contour furrowing of 7,000 acres, construction of 280 check dams and the development of 225 watering facilities.

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(c) The rehabilitation effort would be substantially completed by the end of the fifth year. Vegetative response would continue to increase, reaching maximum potential in approximately 12 years following completion of the project.

Minerals

Minerals resource inventory data will be a necessary prerequisite to many other programs contemplated for the project areas. Approximately 1,300,000 acres have some indication of minerals and will need to be covered. First year efforts will cover 430,000 acres, and the balance will be inventoried in detail by the end of the third year. This information will thus be readily available for use by the mining industry and by personnel conducting other Bureau programs.

Recreation

All areas of suspected recreation potential will be thoroughly investigated and detailed plans will be prepared for sites having actual potential in this field. Actual development of sites will proceed no faster than is necessary to meet the anticipated demand. This will require the development of eight comprehensive sites (some containing many separate facilities) during the five-year project period.

First year efforts will be devoted entirely to pre-development plans

necessary to implement the construction of the recreation sites scheduled for completion in F.Y. 1965.

A substantial amount of recreation construction needs will exist after the five-year project has been completed. They are not scheduled as a part of the project since they will not be in demand until later in the 1970's.

Lands

The Master Unit based land tenure analysis will be complete prior to the inauguration of the project. This will permit lands efforts to be concentrated on land tenure adjustment needs identified pursuant to the Master Unit study. These will be principally composed of State and private exchanges, but will also include activities of lesser priority such as withdrawal review and adjustment, small tract subdivision and sale, elimination of occupancy trespass, and disposition of surplus tracts at Bureau Motion Sale.

An estimated 430,000 acres will be included in detailed field studies and appraisal, looking toward completion of the title transfers necessary to build an effective land pattern. This is approximately 38% of the NLR in the Project Area and represents all of the NLR in the area which needs this sort of attention. How much of this will actually change hands during the project period is difficult to determine since actions such as sale and exchange cannot be consummated until the

private land owner is also willing. We estimate actual title transfers at approximately 100,000 acres with a net decrease in NLR acreage of approximately 10 to 20,000 acres.

First year efforts will be devoted exclusively to completing the title transfers needed to acquire key sites needed for resource development programs. Eighty-five Thousand acres are scheduled for investigation during this first year.

Remaining workload after completion of the 5-year project will consist principally of completing those title transfers identified as being needed, but which could not be consummated due to lack of interest or agreement on the part of the private parties involved.

Engineering Development

Goals are to provide the services, facilities and developments necessary for the accomplishment of goals outlined in the management programs.

Recommendations for the initial year's action consist of preparing designs and contracts for the office and warehouse buildings. This would be accomplished so that construction could start immediately after the commencement of the project period. Additional engineering activity would be devoted to the preliminary surveying and preparation of plans for roads, additional utility buildings, water control structures and recreational site development. Actual construction

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Recommendations for the initial year's action consist of preparing designs and contracts for the office and warehouse buildings. This would be accomplished so that construction could start immediately after the commencement of the project period. Additional engineering activity would be devoted to the preliminary surveying and preparation of plans for roads, additional utility buildings, water control structures and recreational site development. Actual construction

on these phases would commence the second year and proceed through the project period. Road construction, a major feature, would involve a carry over into the year following the last year of the project period. The work load remaining to be accomplished would include road surfacing. The maintenance program would start the year following initial construction of a project road or building. The maintenance on recreational sites would be handled in the same manner. Upkeep will be contracted annually.

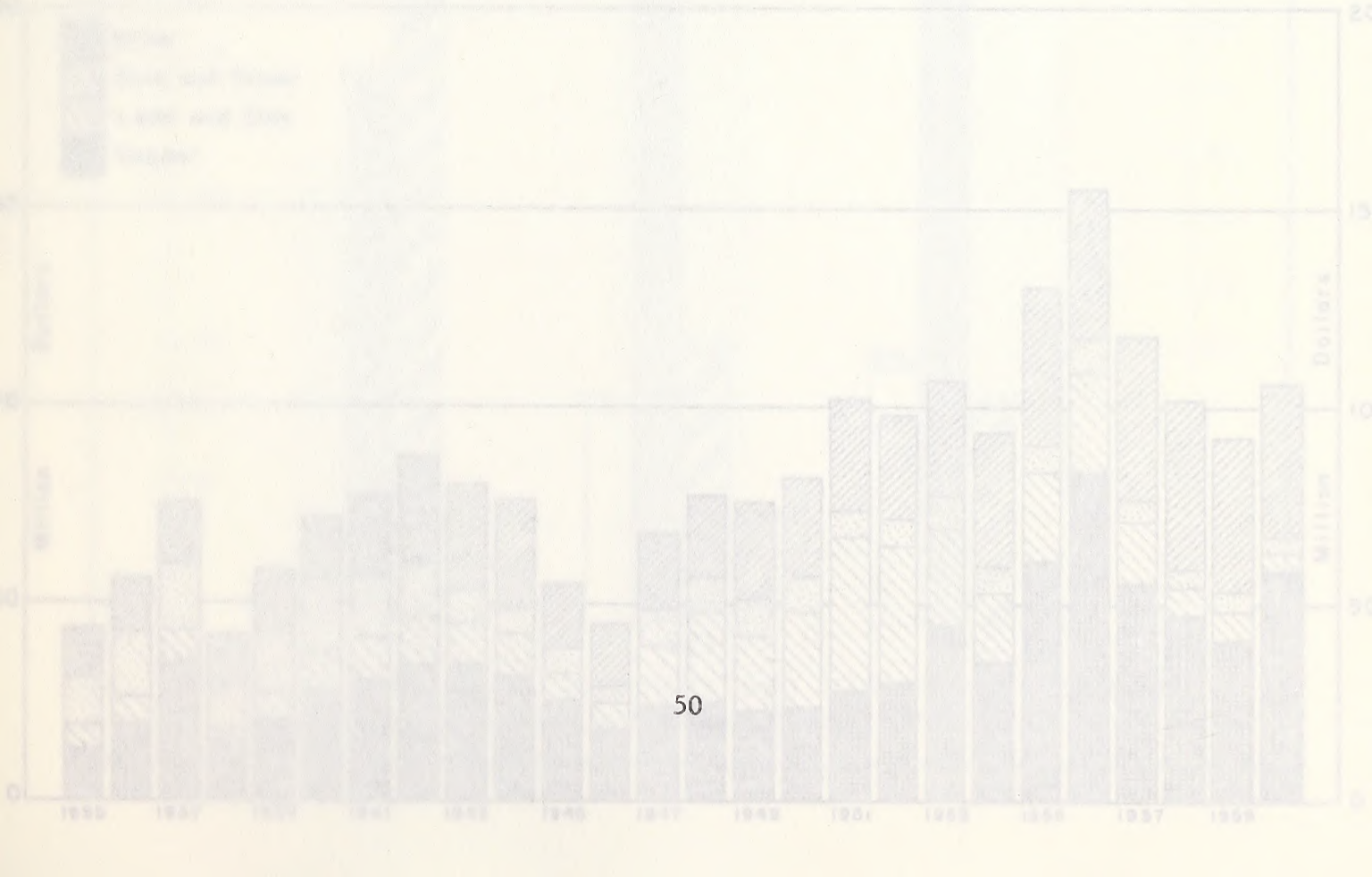


Illustration 1.

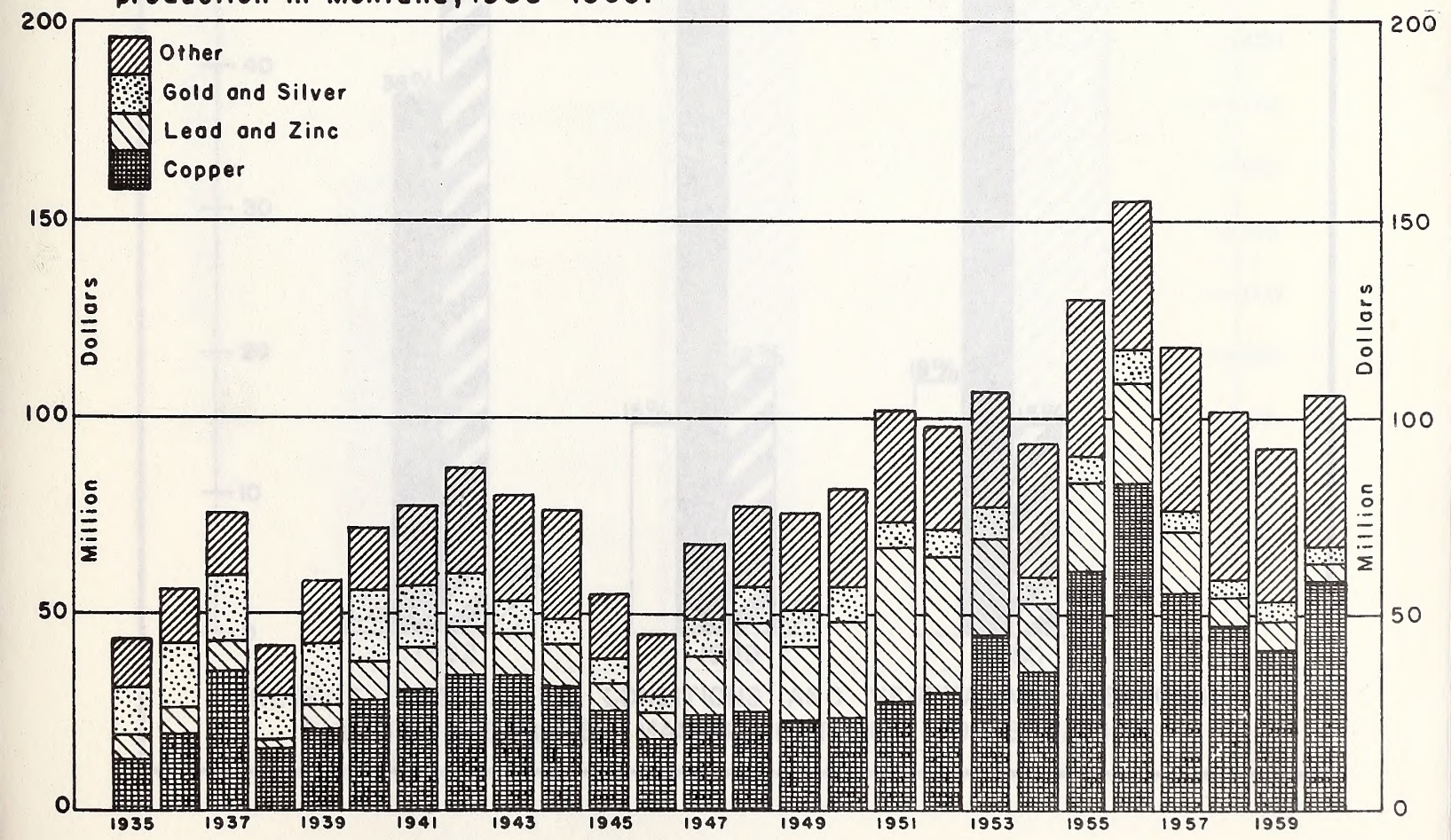
VALUE OF MINERAL PRODUCTION BY COUNTY

(Thousand dollars)

COUNTY	1958	1959	1960	Minerals in 1960 in order of value
BEAVERHEAD	(A)	(A)	(A)	Phosphate rock, talc, lead, zinc, silver, gold and iron ore.
BROADWATER	130	166	264	Iron ore, gold, stone, sand and gravel, lead, silver, copper and zinc.
JEFFERSON	254	132	266	Stone, gold, lead, zinc, silver and copper.
MADISON	620	964	1347	Talc, gold, silver, copper and zinc.
SILVER BOW	62,547	51,719	66,353	Copper, zinc, silver, lead, gold, manganese, phosphate rock, pyrites, sand and gravel.
TOTAL	63,551	52,981	68,230	

(A) Figures not available.

Value of copper, lead and zinc, gold and silver, and total value of mineral production in Montana, 1935 - 1960.



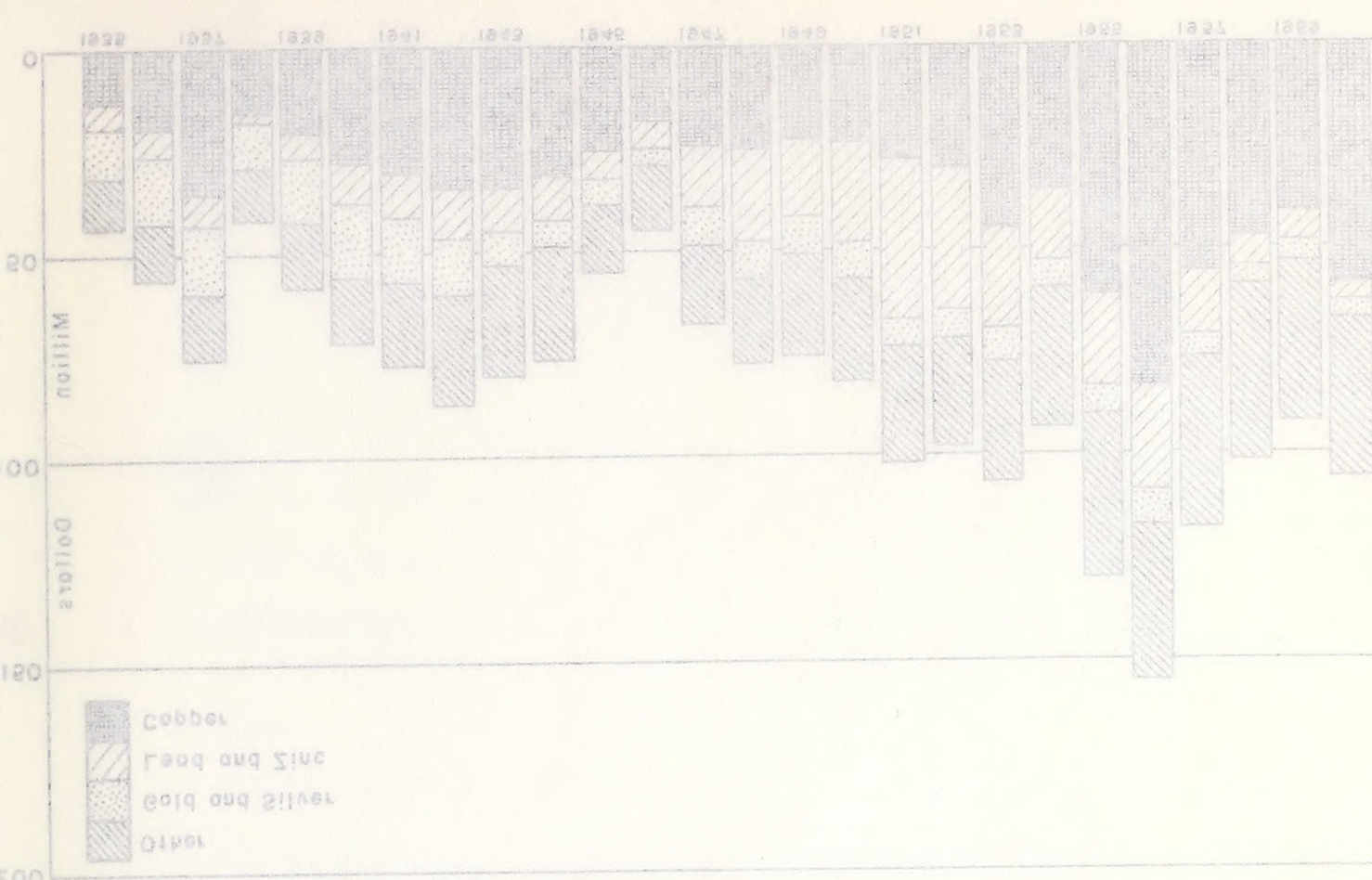


Illustration 1

VALUE OF MINERAL PRODUCTION BY COUNTY

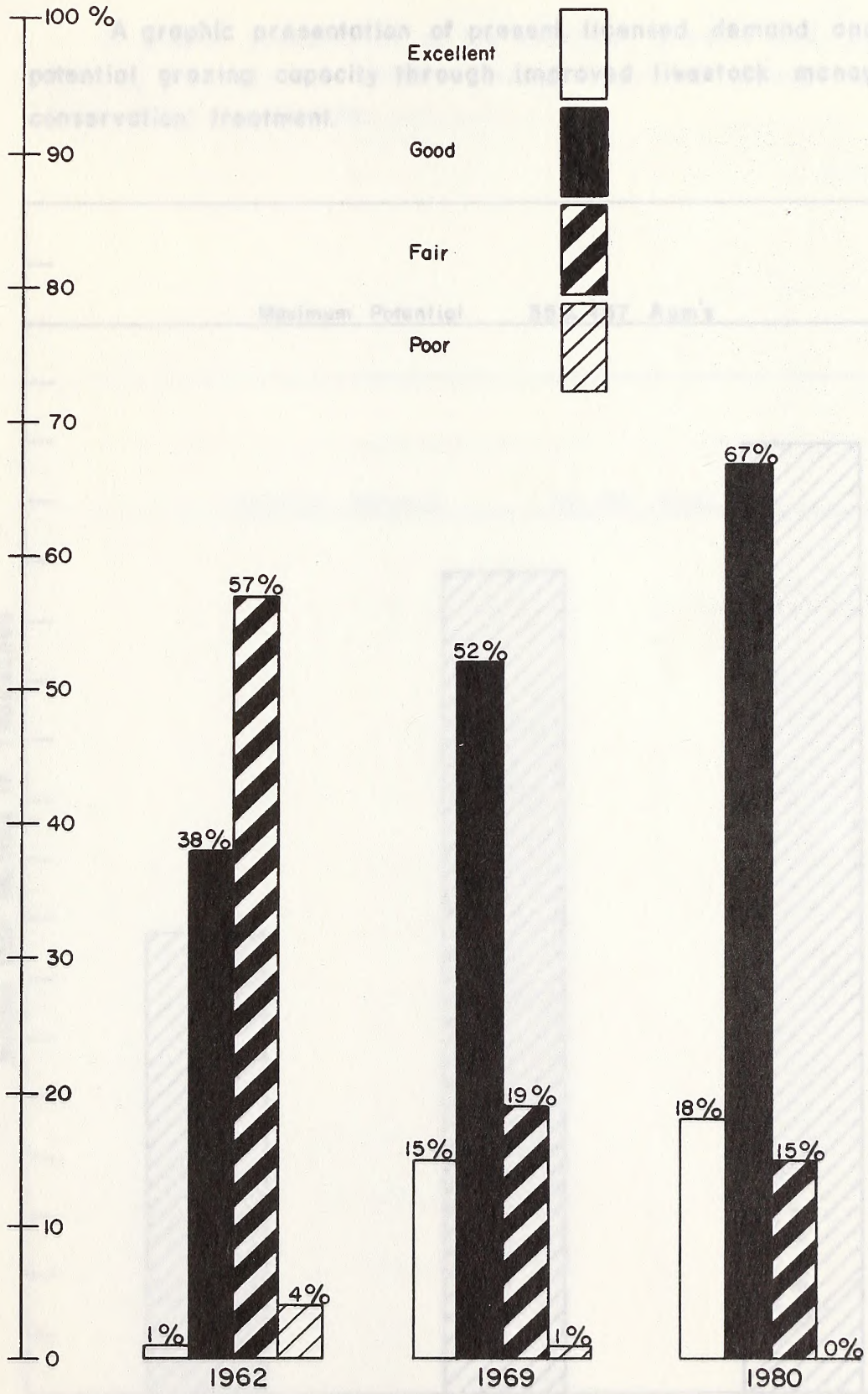
(Thousand dollars)

COUNTY	1988	1989	1990	Minerals in 1990 in order of value
BEAVERHEAD	(A)	(A)	(A)	Iron ore, Phosphate rock, talc, lead, zinc, silver, gold and
BROADWATER	120	166	564	Iron ore, gold, stone, sand and gravel, lead, silver, copper and zinc.
JEFFERSON	584	135	566	Stone, gold, lead, zinc, silver and copper.
MADISON	650	664	1547	Talc, gold, silver, copper and zinc.
SILVER BOW	65,744	61,716	66,565	Copper, zinc, silver, lead, gold, manganese, phosphate rock, barites, sand and gravel.
TOTAL	67,221	65,881	69,565	

(A) Figures not available.

Value of copper, lead and zinc, gold and silver, and total value of mineral production in Montana, 1988 - 1990.

Illustration 2.



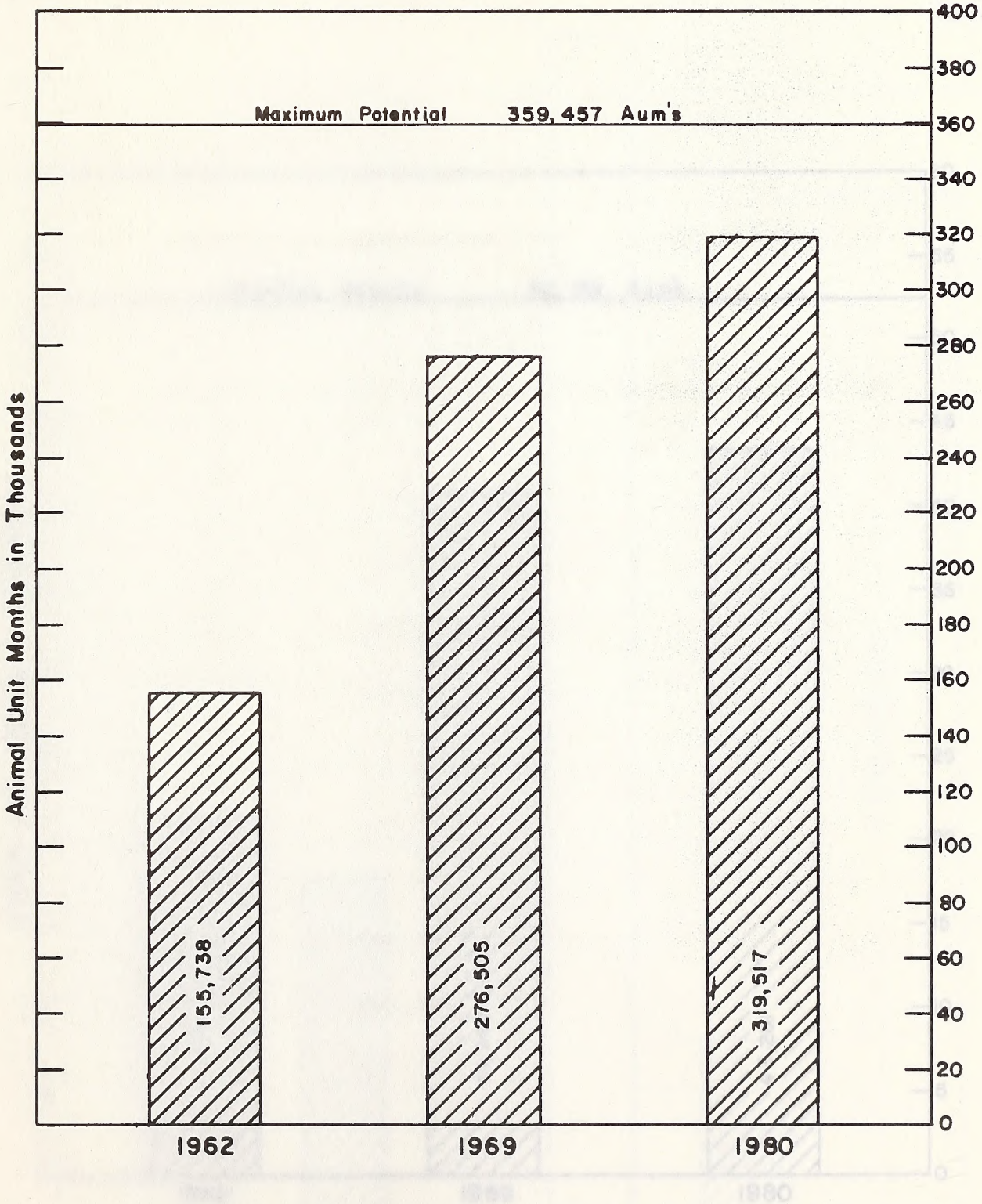
PRESENT VEGETATIVE CONDITIONS AND VEGETATIVE RESPONSE DUE TO INTENSIFIED MANAGEMENT AND CONSERVATION

Illustration 2.

PRESENT VEGETATIVE CONDITIONS AND VEGETATIVE RESPONSE DUE TO INTENSIFIED MANAGEMENT AND CONSERVATION

Illustration 3.

A graphic presentation of present licensed demand and estimated potential grazing capacity through improved livestock management and conservation treatment.



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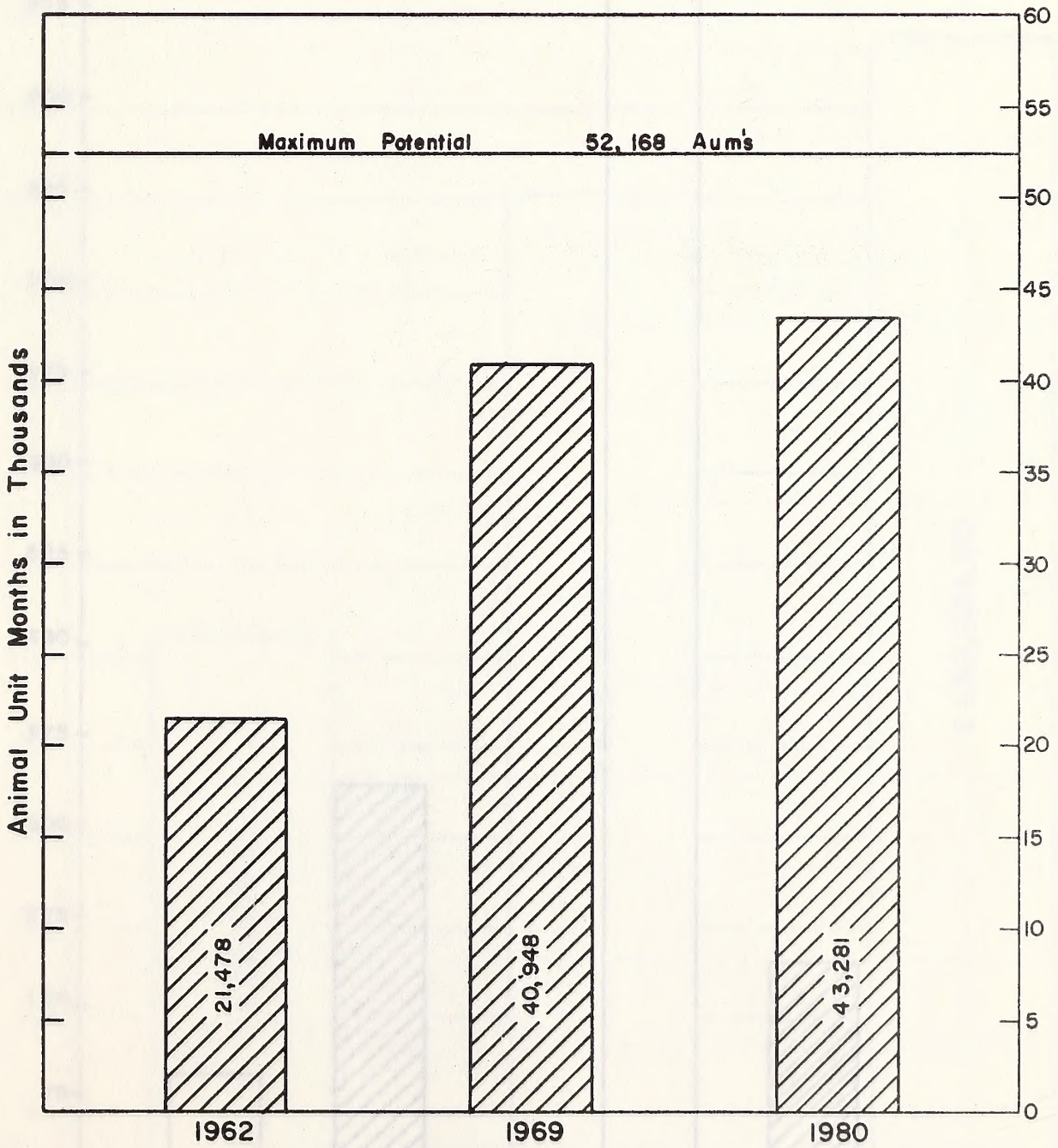
A graphic presentation of present licensed demand and estimated potential grazing capacity through improved livestock management and conservation treatment.

Illustration 4.

A graphic presentation of the estimated present and potential grazing capacity for wildlife through improved management and conservation treatments.



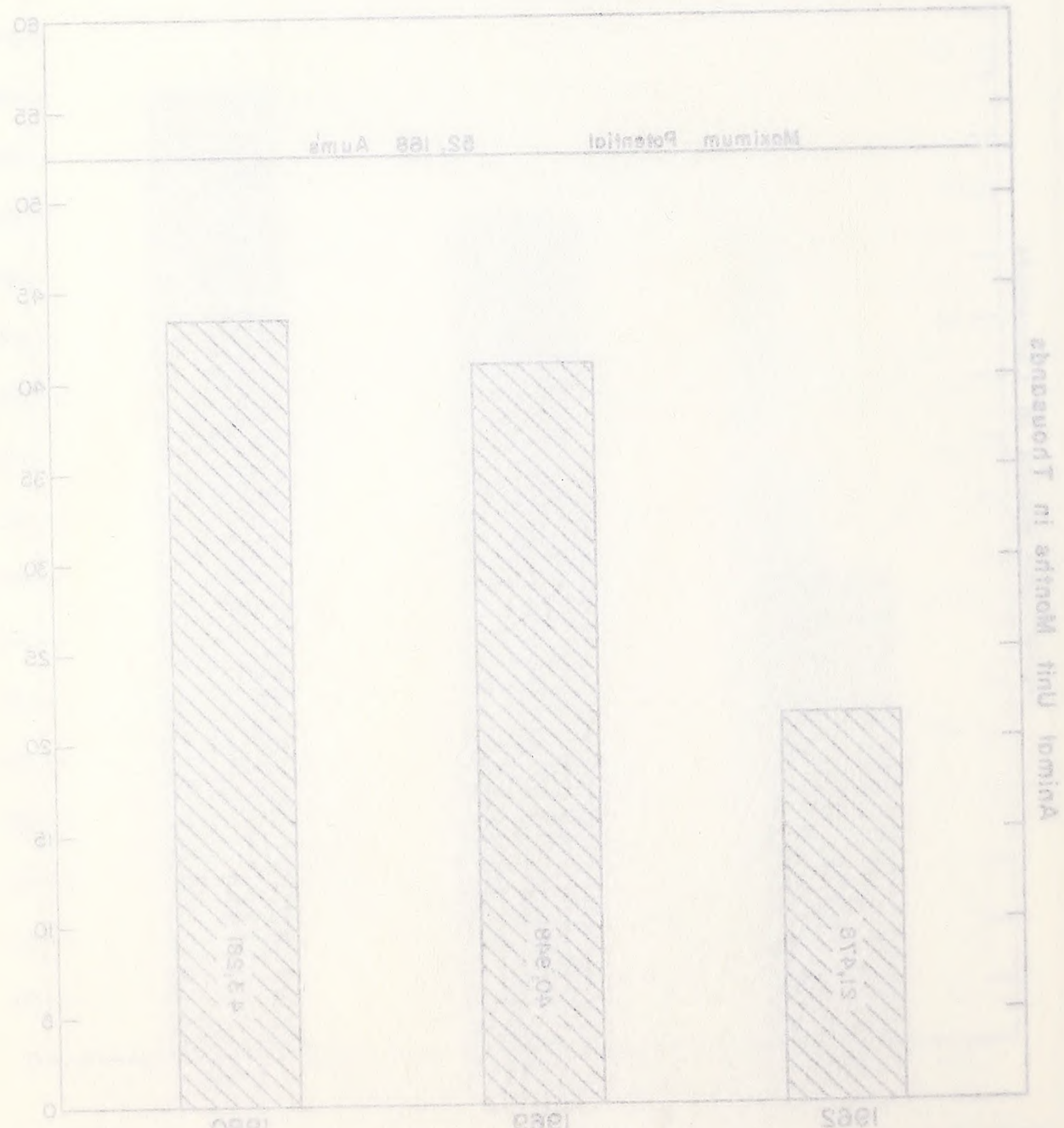

Animal Unit Months in Thousands
0
5
10
15
20
25
30
35
40
45
50
55
60
1962
1963
1980

Illustration 5.

GRAPHIC ILLUSTRATION SHOWING RESPONSE OF VEGETATION THROUGH SPRAYING WITH 2,4-D

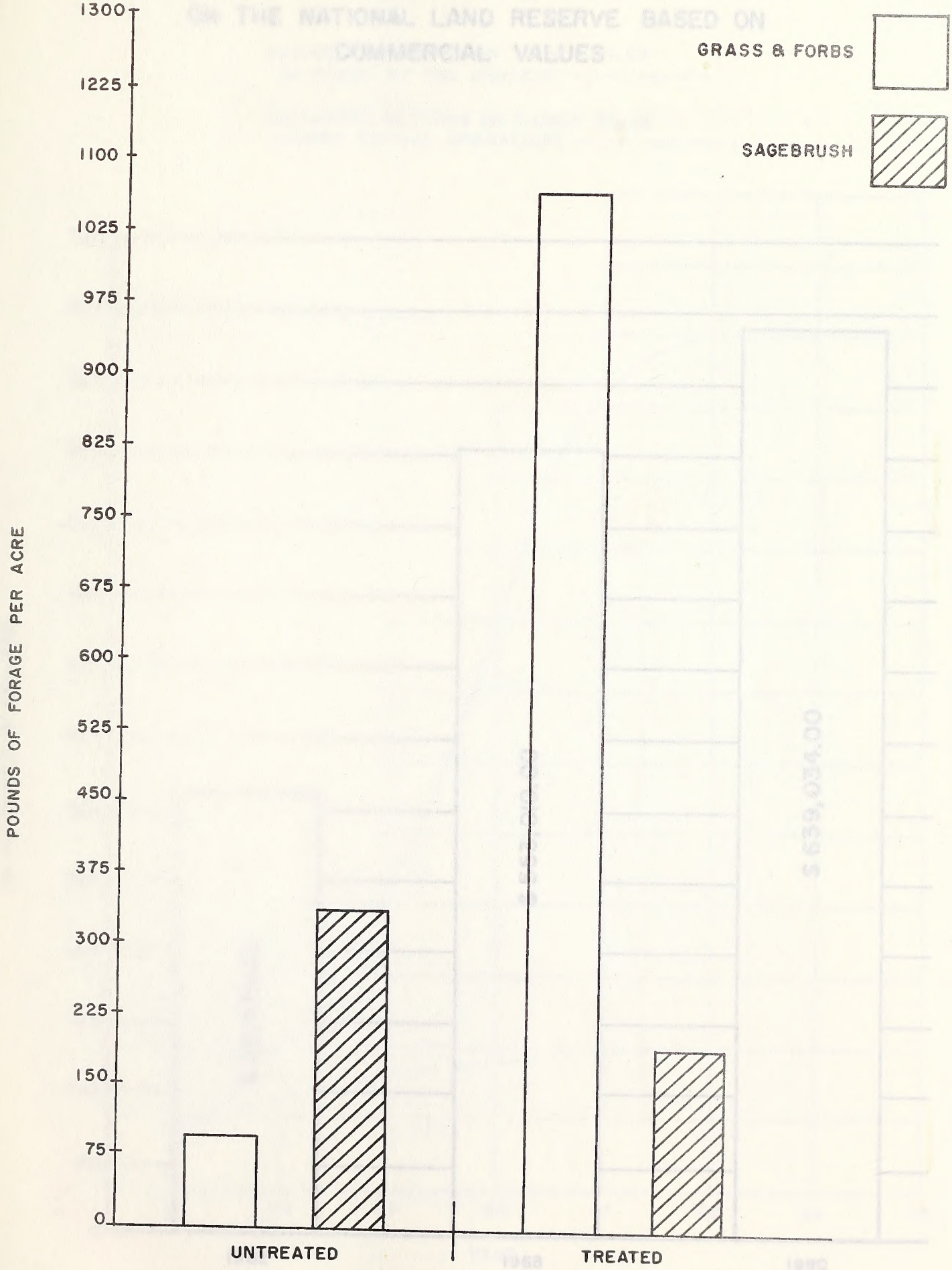


Illustration 5.

GRAPHIC ILLUSTRATION SHOWING RESPONSE OF VEGETATION THROUGH SPRAYING WITH 2,4-D

Illustration 6.

ECONOMIC RETURNS FROM VEGETATIVE INCREASE ON THE NATIONAL LAND RESERVE BASED ON COMMERCIAL VALUES

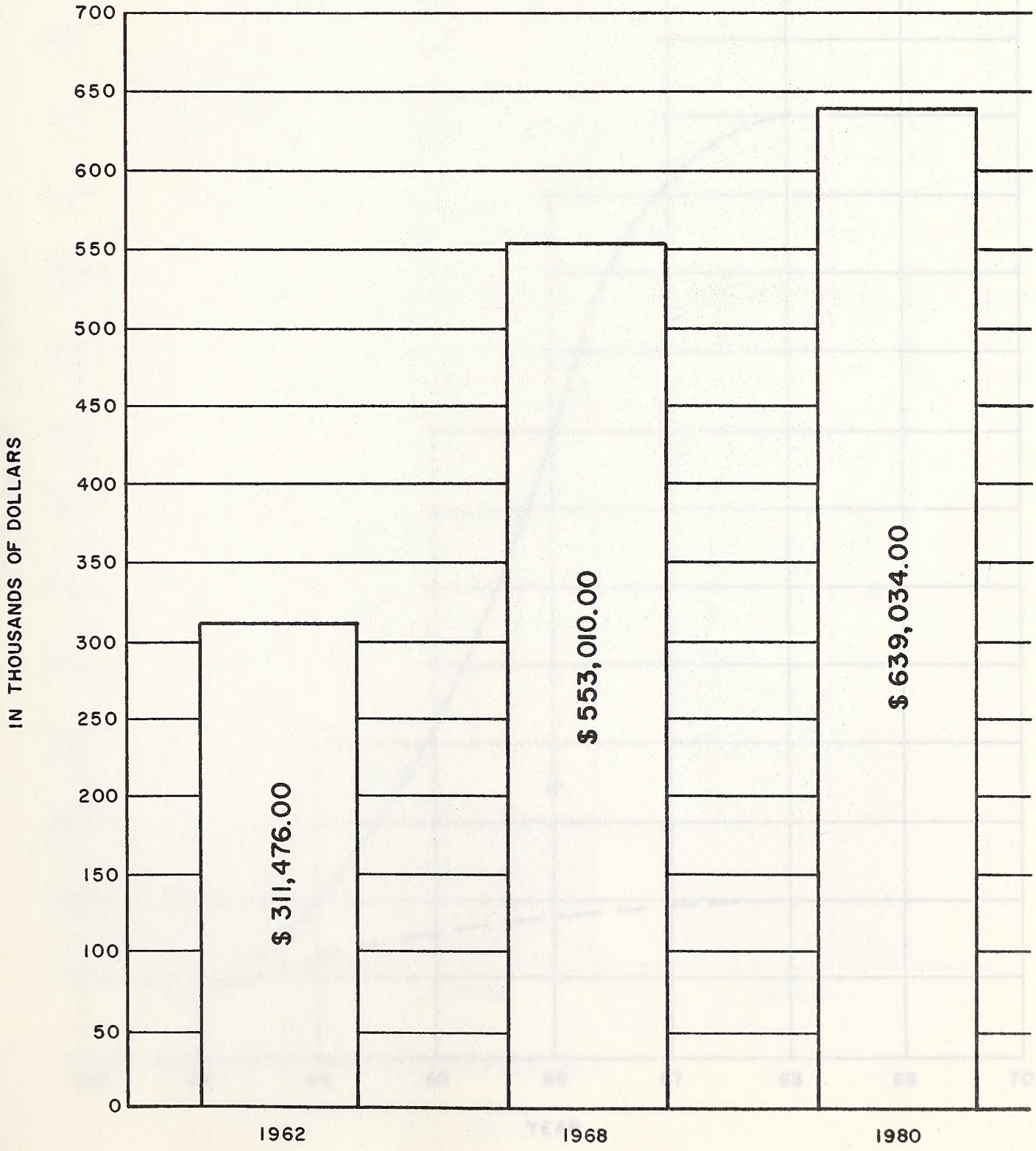


Illustration 6.

ECONOMIC RETURNS FROM VEGETATIVE INCREASE ON THE NATIONAL LAND RESERVE BASED ON COMMERCIAL VALUES

Illustration 7.

TIMBER MANAGEMENT PROGRAM

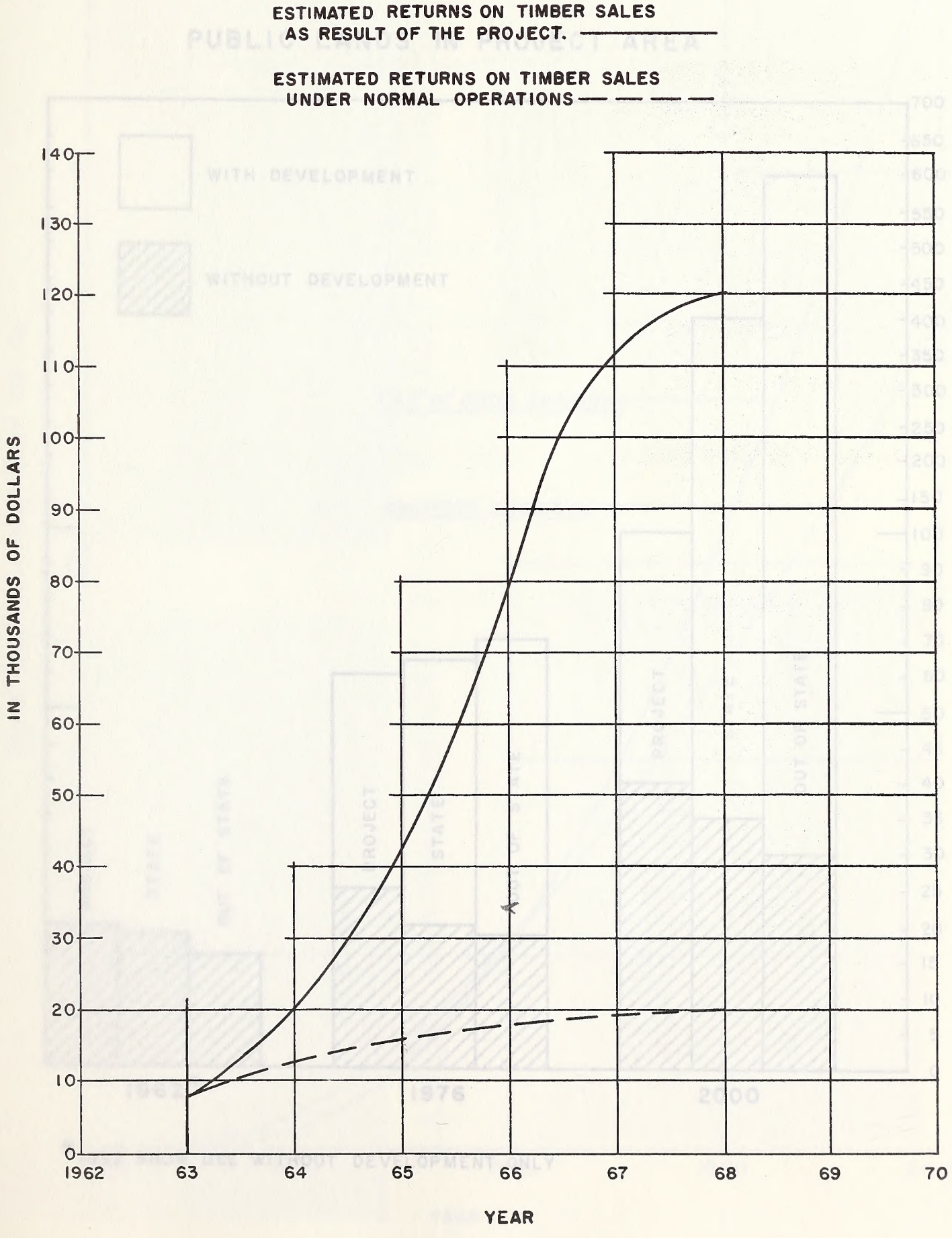


Illustration 7

TIMBER MANAGEMENT PROGRAM

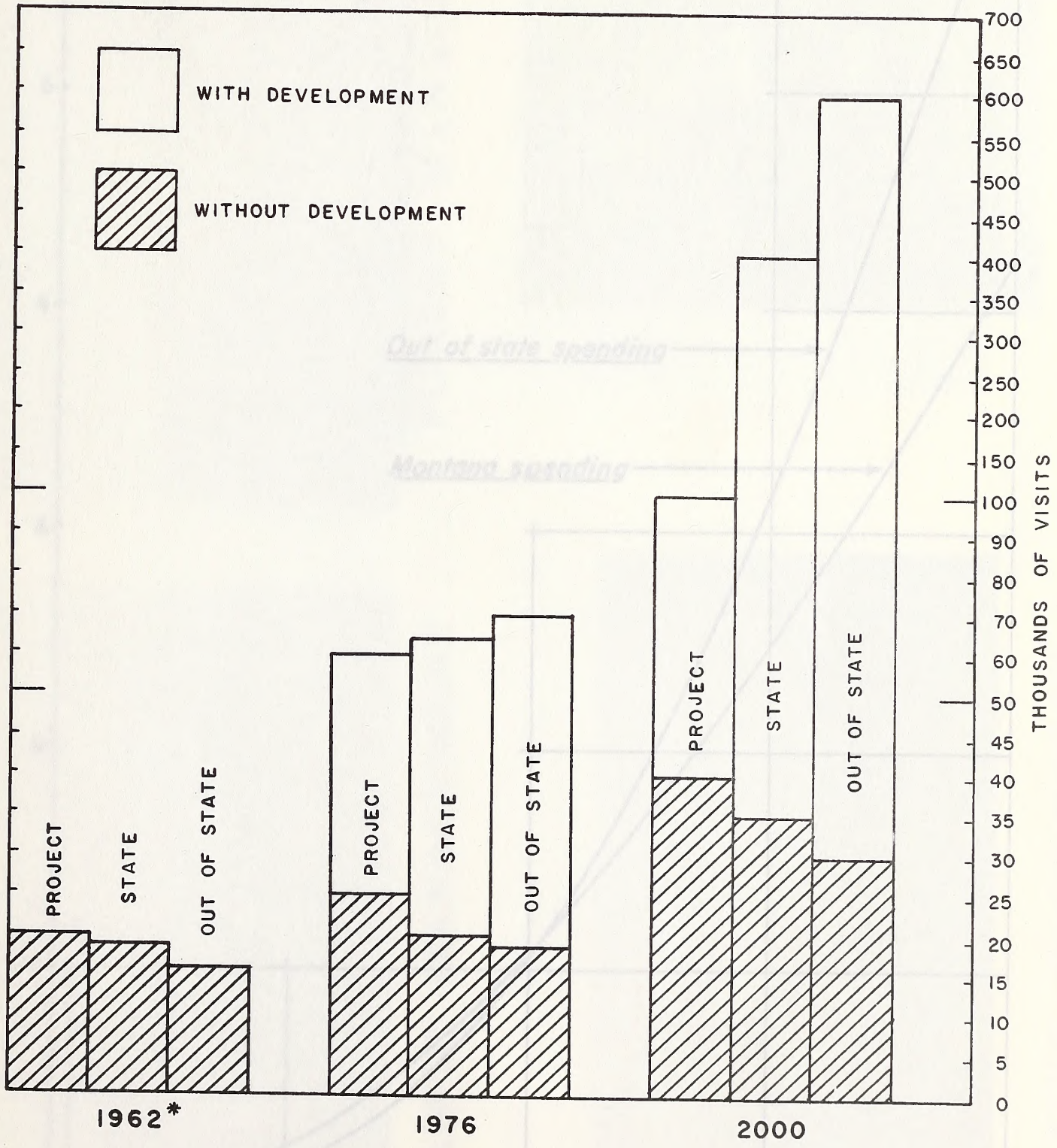
ESTIMATED RETURNS ON TIMBER SALES
AS RESULT OF THE PROJECT: ————————

ESTIMATED RETURNS ON TIMBER SALES
UNDER NORMAL OPERATIONS — — — — —

DOLLARS IN THOUSANDS

Illustration 8.

VISITATION AND RECREATIONAL INFLUENCE FOR USE OF PUBLIC LANDS IN PROJECT AREA



*1962 SHOW USE WITHOUT DEVELOPMENT ONLY

Illustration 8.

VISITATION AND RECREATIONAL INFLUENCE FOR USE OF PUBLIC LANDS IN PROJECT AREA

Illustration 9.

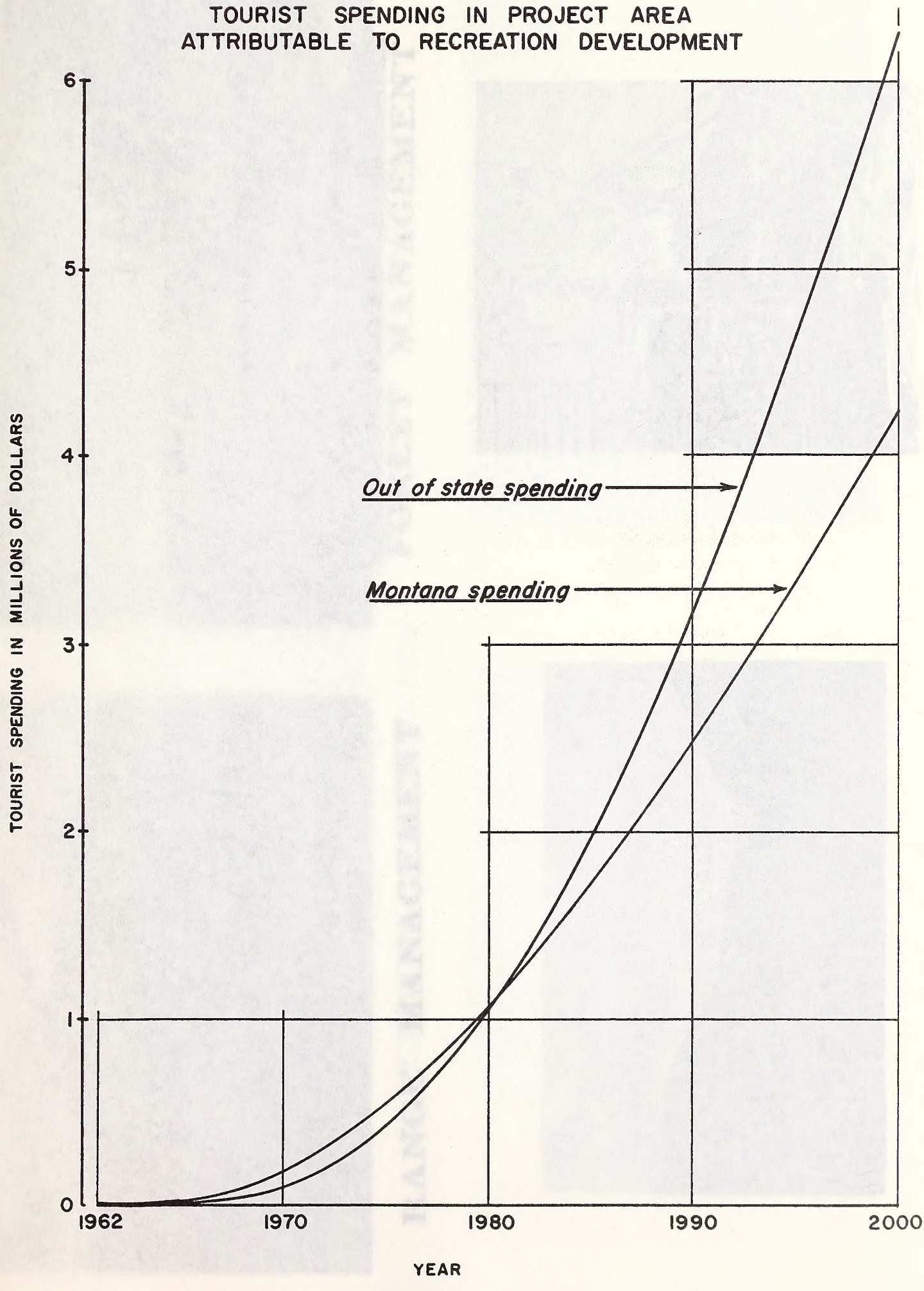
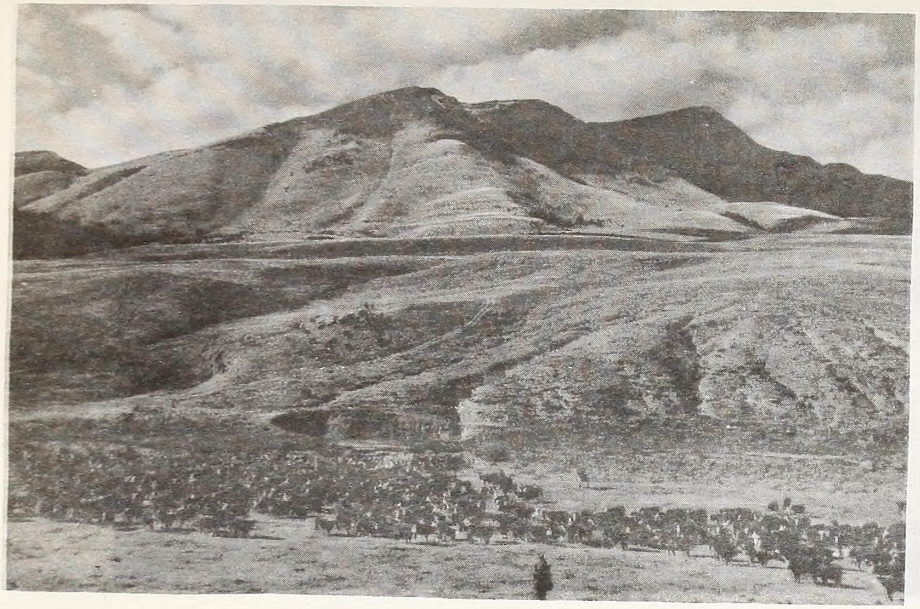


Illustration 9.

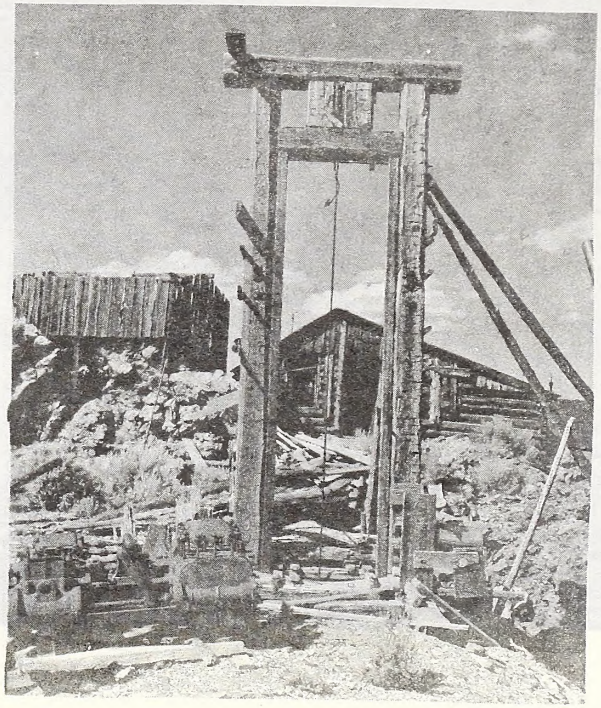
TOURIST SPENDING IN PROJECT AREA
ATTRIBUTABLE TO RECREATION DEVELOPMENT



RANGE MANAGEMENT

FOREST MANAGEMENT

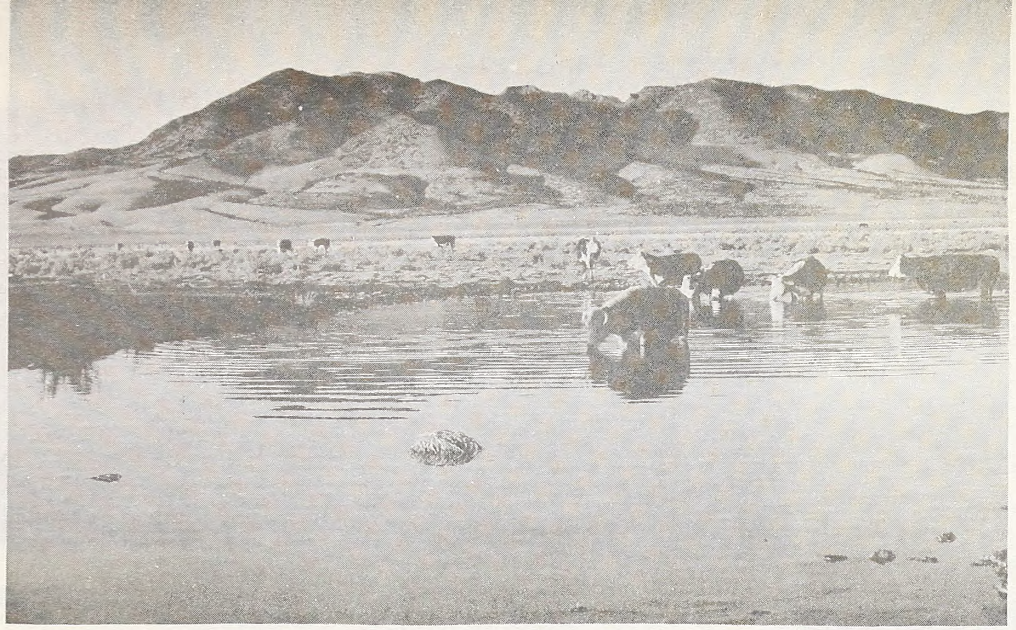
RECREATION



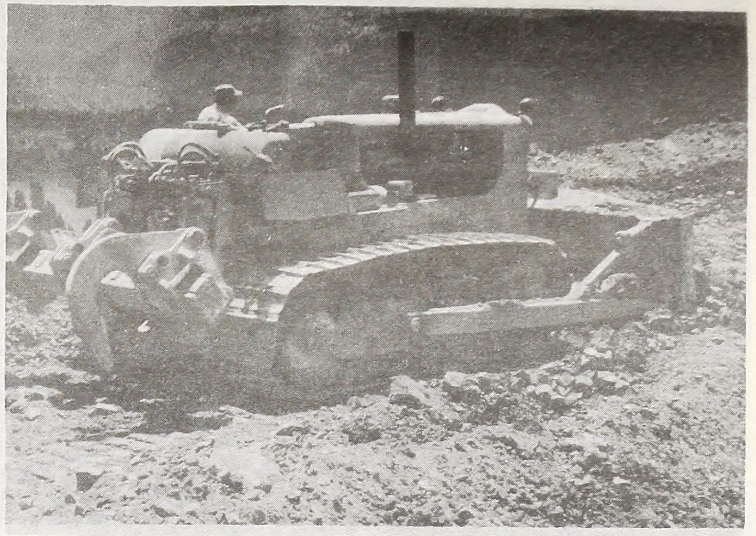
MINERALS MANAGEMENT

FOREST MANAGEMENT

RANGE MANAGEMENT



WATERING FACILITIES



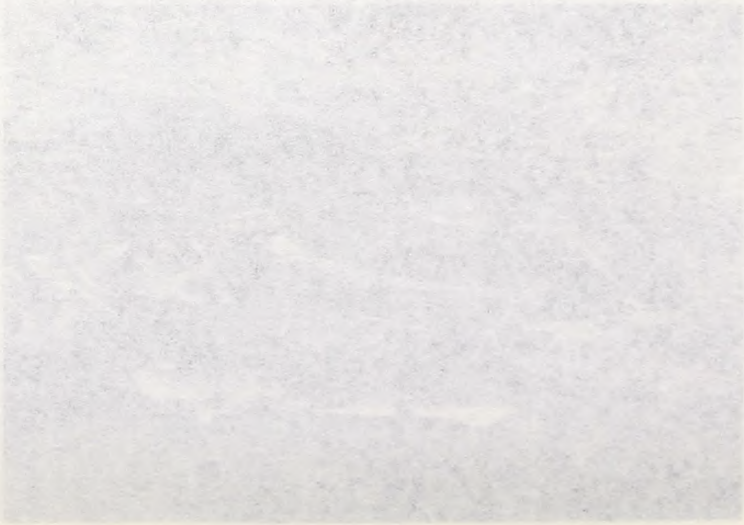
CONSTRUCTION

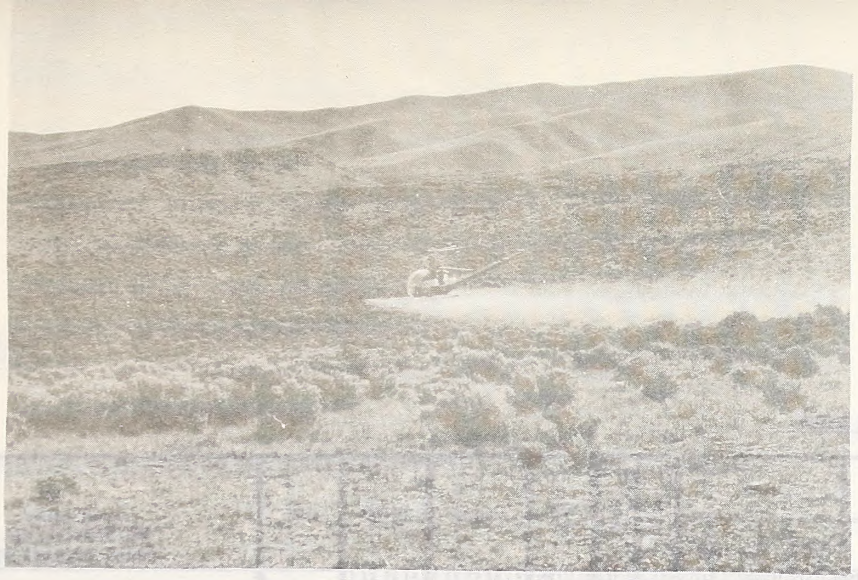
FIRE PROTECTION

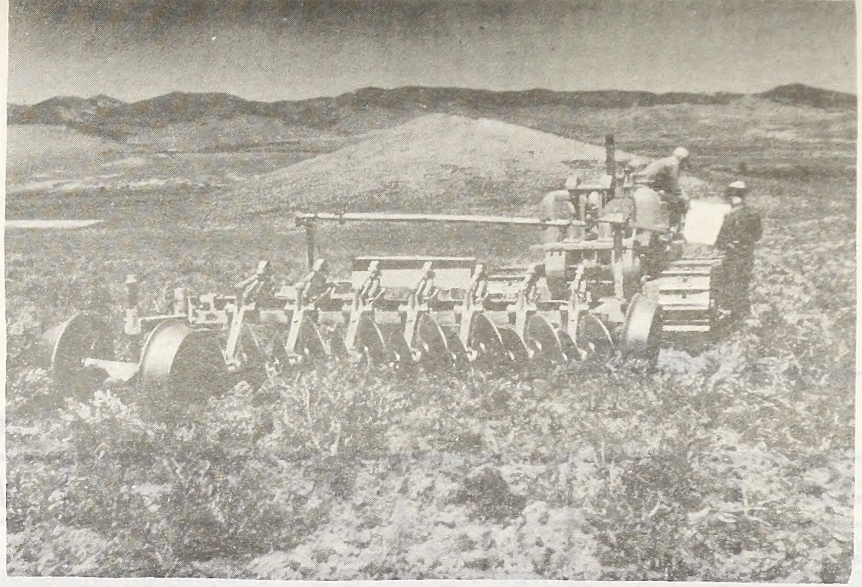
WILDLIFE

MATERIAL FACILITIES

CONSTRUCTION







Methods

Results

LAND TREATMENT

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PROJECT SCHEDULE

Project Name: SACAJAWEA

RANGE MANAGEMENT AND PROTECTION

Project Feature: ADMINISTRATION OF GRAZING LANDS		Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
Resource Survey	A	(1000's) Acres		1031	20	25	05	398	14			159	4	159	5	80	5						
	B	(1000's) Acres		1031	20	25	05	286	3			115	1	115	1	56	1						
	T	(1000's) Acres		1031	200	25	05	684	17			274	5	274	6	136	6						
Dependent Property Survey	A	Cases		1031	300	25	05	290	31			60	6	63	7	53	6	53	6	61	6		
	B	Cases		1031	300	25	05	19	8							10	3	9	3		2		
	T	Cases		1031	300	25	05	309	39			60	6	63	7	63	9	62	9	61	8		
Range Adjudication	A	Cases		1031	400	25	05	306	35			65	7	65	7	55	7	61	7	60	7		
	B	Cases		1031	400	25	05	19	9							10	2	4	3	5	4		
	T	Cases		1031	400	25	05	325	44			65	7	65	7	65	9	65	10	65	11		
Range Use Supervision	A	MM		1031	510	25	05	124	71			31	13	31	14	19	14	19	15	24	15		
	B	MM		1031	510	25	05	31	18							12	6	12	6	7	6		
	T	MM		1031	510	25	05	155	89			31	13	31	14	31	20	31	21	31	21		
Range Use Adjustments	A	MM		1031	520	25	05	52	31			13	6	13	6	8	6	9	6	9	7		
	B	MM		1031	520	25	05	13	8							5	3	4	3	4	2		
	T	MM		1031	520	25	05	65	39			13	6	13	6	13	9	13	9	13	9		

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PROJECT SCHEDULE

Project Name: SACAJAWEA

RANGE MANAGEMENT AND PROTECTION

Project Feature		Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
			1 2 3 4	5 6 7 8 9	10 11 12	13 14	15 16	17 18 19 20	21 22 23 24	25 26 27 28	29 30 31 32	33 34 35 36	37 38 39 40	41 42 43 44	45 46 47 48	49 50 51 52	53 54 55 56	57 58 59 60	61 62 63 64	65 66 67 68	69 70 71 72	73 74 75 76	77 78 79 80
Wildlife Management	A	MM		1 0 3 1 0	6 0 0	2 5	0 5	8	4			2	1	2	1	2	1	1		1	1		
	B	MM		1 0 3 1 0	6 0 0	2 5	0 5	2	2									1	1	1	1		
	T	MM		1 0 3 1 0	6 0 0	2 5	0 5	1 0	6			2	1	2	1	2	1	2	1	2	2		
Range Studies	A	MM		1 0 3 1 0	7 0 0	2 5	0 5	9 4	5 4			1 7	1 0	1 8	1 1	1 6	1 1	2 0	1 1	2 3	1 1		
	B	MM		1 0 3 1 0	7 0 0	2 5	0 5	2 4	1 3							9	4	8	4	7	5		
	T	MM		1 0 3 1 0	7 0 0	2 5	0 5	1 1 8	6 7			1 7	1 0	1 8	1 1	2 5	1 5	2 8	1 5	3 0	1 6		
Cooperative Research	A			1 0 3 1 0	8 0 0	2 5	0 5		4				1		1				1		1		
	B			1 0 3 1 0	8 0 0	2 5	0 5		1												1		
	T			1 0 3 1 0	8 0 0	2 5	0 5	1	5				1		1				1		2		
Grazing Lease Administration	A	Cases		1 0 3 1 0	9 0 0	2 5	0 5	9 0	2 6			1 8	5	1 8	5	1 8	6	1 8	5	1 8	5	8 6	2 4
	B	Cases		1 0 3 1 0	9 0 0	2 5	0 5																
	T	Cases		1 0 3 1 0	9 0 0	2 5	0 5	9 0	2 6			1 8	5	1 8	5	1 8	6	1 8	5	1 8	5	8 6	2 4
Program Services	A	MM		1 0 3 1 0	1 0 0	2 5	0 5	8	4			2		2	1	2	1	1	1	1	1		
	B	MM		1 0 3 1 0	1 0 0	2 5	0 5	2	2									1	1	1	1		
	T	MM		1 0 3 1 0	1 0 0	2 5	0 5	1 0	6			2		2	1	2	1	2	2	2	2		
TOTAL		MM		1 0 3 1 0	0 0 0	2 5	0 5	5 4 7	3 3 8			1 0 8	5 4	1 0 9	5 9	1 1 1	7 6	1 0 8	7 3	1 1 1	7 6	8 6	2 4

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PROJECT SCHEDULE

Project Name: SACAJAWEA

RANGE MANAGEMENT AND PROTECTION

Project Feature: FIRE PRESUPPRESSION	Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
Education	MM		1032	210	25	05	59	26			9	4	11	5	11	5	14	6	14	6		
Investigation & Enforcement	MM		1032	220	25	05	17	9			3	1	3	2	3	2	4	2	4	2		
Hazard Reduction	Acres		1032	230	25	05																
Fire Breaks	Miles		1032	240	25	05	42	8					8	2	14	3	11	2	9	1		
Planning & Training	MM		1032	310	25	05	92	45			14	7	17	8	17	8	22	11	22	11		
Equipment, Tools & Supplies			1032	320	25	05		30				30										
Temporary Facilities			1032	330	25	05																
Detection	MM		1032	340	25	05	38	17			6	3	7	3	7	3	9	4	9	4		
Cooperative Studies			1032	350	25	05																
Program Services			1032	100	25	05																
TOTAL			1032	000	25	05	207	135			32	45	56	20	52	21	60	25	58	24		
TOTAL RANGE MANAGEMENT AND PROTECTION	MM		1030	000	25	05	*754	*473			140	99	147	79	149	97	157	98	161	100		

* TOTAL BASED ON T COLUMN - DEDUCT 20% TO OBTAIN (B

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PROJECT SCHEDULE

Project Name: SACAJAWEA

REHABILITATION, IMPROVEMENT AND CONSERVATION OF SOIL AND MOISTURE

Project Feature		Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
SOIL AND MOISTURE CONSERVATION			1 2 3 4	5 6 7 8 9	10 11 12	13 14	15 16	17 18 19 20	21 22 23 24	25 26 27 28	29 30 31 32	33 34 35 36	37 38 39 40	41 42 43 44	45 46 47 48	49 50 51 52	53 54 55 56	57 58 59 60	61 62 63 64	65 66 67 68	69 70 71 72	73 74 75 76	77 78 79 80
Land Use (Watershed) Planning	A	(1000's Acres)		10600	300	25	05	953	184			193	51	190	34	190	33	190	33	190	33		
	B	(1000's Acres)		10600	300	25	05	285	56			142	28	143	28								
	T	(1000's Acres)		10600	300	25	05	1238	240			335	79	333	62	190	33	190	33	190	33		
Brush Control	A	(100's Acres)		10600	510	25	05	1410	615			300	134	290	125	260	113	290	126	270	117		
	B	(100's Acres)		10600	510	25	05	190	92							50	25	50	25	90	42		
	T	(100's Acres)		10600	510	25	05	1600	707			300	134	290	125	310	138	340	151	360	159		
Fencing	A	Miles		10600	520	25	05	400	427			50	57	70	75	80	85	100	105	100	105		
	B	Miles		10600	520	25	05	130	157							35	44	35	44	60	69		
	T	Miles		10600	520	25	05	530	584			50	57	70	75	115	129	135	149	160	174		
Seeding	-	(100's Acres)		10600	530	25	05	53	90			12	25	12	20	20	27	9	18				
Other	A	(1000's Acres)		10600	540	25	05	48	2899			12	75	11	64	9	53	9	53	7	44		
	B	(1000's Acres)		10600	540	25	05	15	84							6	32	5	28	4	24		
	T	(1000's Acres)		10600	540	25	05	63	3733			12	75	11	64	15	85	14	81	11	68		
Water Development	A	Number		10600	610	25	05	175	185			30	40	35	36	35	36	30	35	45	38		
	B	Number		10600	610	25	05	50	25							15	8	15	8	20	9		
	T	Number		10600	610	25	05	225	210			30	40	35	36	50	44	45	43	65	47		

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PROJECT SCHEDULE

Project Name: SACAJAWEA

REHABILITATION, IMPROVEMENT AND CONSERVATION OF SOIL AND MOISTURE

Project Feature	Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
SOIL AND MOISTURE CONSERVATION		1 2 3 4	5 6 7 8 9	10 11 12	13 14	15 16	17 18 19 20	21 22 23 24	25 26 27 28	29 30 31 32	33 34 35 36	37 38 39 40	41 42 43 44	45 46 47 48	49 50 51 52	53 54 55 56	57 58 59 60	61 62 63 64	65 66 67 68	69 70 71 72	73 74 75 76	77 78 79 80
Water Control	Number		10600	620	25	05	20	776				29		126		142		213		266		
Program Facilities A	Number		10600	700	25	05	50	41			10	9	10	8	10	8	10	8	10	8		
B	Number		10600	700	25	05	35	28							10	9	10	9	15	10		
T	Number		10600	700	25	05	85	69			10	9	10	8	20	17	20	17	25	18		
Program Services	Man Months		10600	100	25	05	17	16			5	4	3	3	3	3	3	3	3	3		
TOTAL	Man Months		10600	000	25	05		3065				452		519		618		708		768		
WEED CONTROL																						
Weed Control	MM		11000	000	25	05																
TOTAL - Rehabilitation, Improvement & Conservation of Soil & Moisture								3065				452		519		618		708		768		

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PROJECT SCHEDULE

Project Name: SACAJAWEA

6

FOREST MANAGEMENT, DEVELOPMENT & PROTECTION

Project Feature: FOREST MANAGEMENT		Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
			1 2 3 4	5 6 7 8 9	10 11 12	13 14	15 16	17 18 19 20	21 22 23 24	25 26 27 28	29 30 31 32	33 34 35 36	37 38 39 40	41 42 43 44	45 46 47 48	49 50 51 52	53 54 55 56	57 58 59 60	61 62 63 64	65 66 67 68	69 70 71 72	73 74 75 76	77 78 79 80
Forest Inventory	A	MM		10421	200	25	05	60	55			22	20	22	23		8	3	2	3	2		
	B	MM		10421	200	25	05	35	25							5	3	20	17	10	5		
	T	MM		10421	200	25	05	95	80			22	20	22	23	15	11	23	19	13	7		
Management Plans	A	MM		10421	300	25	05	50	54			10	18	10	10	10	10	10	8	10	8		
	B	MM		10421	300	25	05	15	12							5	6	5	3	5	3		
	T	MM		10421	300	25	05	65	66			10	18	10	10	15	16	15	11	15	11		
Forest Product Sales: Timber	A	MMBF		10421	410	25	05	44	2111			5	45	9	46	10	40	10	40	10	40		
	B	MMBF		10421	410	25	05	2	11									1	6	1	5		
	T	MMBF		10421	410	25	05	46	222			5	45	9	46	10	40	11	46	11	45		
Other Forest Products	A	MM		10421	420	25	05	11	9			2	2	2	1	2	2	2	2	3	2		
	B	MM		10421	420	25	05	2	1									1	1	1			
	T	MM		10421	420	25	05	13	10			2	2	2	1	2	2	3	3	4	2		
Trespass	A	Cases		10421	500	25	05	15	16			3	3	3	3	3	3	3	3	3	4		
	B	Cases		10421	500	25	05	10	10			2	2	2	2	2	2	2	2	2	2		
	T	Cases		10421	500	25	05	25	26			5	5	5	5	5	5	5	5	5	6		

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PROJECT SCHEDULE

Project Name: SACAJAWEA

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FOREST MANAGEMENT, DEVELOPMENT & PROTECTION

Project Feature		Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
FOREST MANAGEMENT			1 2 3 4	5 6 7 8 9	10 11 12	13 14	15 16	17 18 19 20	21 22 23 24	25 26 27 28 29 30 31 32		33 34 35 36	37 38 39 40	41 42 43 44	45 46 47 48	49 50 51 52	53 54 55 56	57 58 59 60	61 62 63 64	65 66 67 68	69 70 71 72	73 74 75 76	77 78 79 80
Other	A	MM		10421	600	25	05	12	10			2	2	3	2	2	2	3	2	2	2		
	B	MM		10421	600	25	05																
	T	MM		10421	600	25	05	12	10			2	2	3	2	2	2	3	2	2	2		
Program Services	A	MM		10421	100	25	05	6	5			1	1	2	1	1	1	1	1	1	1		
	B	MM		10421	100	25	05																
	T	MM		10421	100	25	05	6	5			1	1	2	1	1	1	1	1	1	1		
TOTAL	A	MM		10421	000	25	05	415	360			93	91	95	86	81	66	73	58	73	59		
	B	MM		10421	000	25	05	66	59			2	2	2	2	12	11	30	29	20	15		
	T	MM		10421	000	25	05	481	419			95	93	97	88	93	77	103	87	93	74		

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PROJECT SCHEDULE

Project Name: SACAJAWEA

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FOREST MANAGEMENT, DEVELOPMENT & PROTECTION

Project Feature: FOREST DEVELOPMENT		Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
		(100's)																					
Plans and Surveys	A	Acres		1042300	2000	25	05	60	25			25	10	25	10	10	5						
	B	(100's) Acres		1042300	2000	25	05	80	27							20	9	30	9	30	9		
	T	(100's) Acres		1042300	2000	25	05	140	52			25	10	25	10	30	14	30	9	30	9		
Site Improvement	A	(10's) Acres		1042310	2000	25	05	60	15							60	15						
	B	(10's) Acres		1042310	2000	25	05																
	T	(10's) Acres		1042310	2000	25	05	60	15							60	15						
Reforestation	A	(10's) Acres		1042320	2000	25	05	340	1330			11		80	31	80	33	90	33	90	22		
	B	(10's) Acres		1042320	2000	25	05	180	80							12		90	34	90	34		
	T	(10's) Acres		1042320	2000	25	05	520	2110			11		80	31	80	45	180	67	180	56		
Stand Improvement	A	(10's) Acres		1042330	2000	25	05	70	61			10	10	10	10	10	10	20	16	20	15		
	B	(10's) Acres		1042330	2000	25	05																
	T	(10's) Acres		1042330	2000	25	05	70	61			10	10	10	10	10	10	20	16	20	15		
Cooperative Studies				1042340	0025	05																	
Program Services	A	MM		1042310	0025	05		5	4					1	1	1	1	2	1	1	1		
	B	MM		1042310	0025	05																	
	T	MM		1042310	0025	05		5	4					1	1	1	1	2	1	1	1		

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BUREAU OF LAND MANAGEMENT

PROJECT SCHEDULE

Project Name: SACAJAWEA

FOREST MANAGEMENT, DEVELOPMENT & PROTECTION

Project Feature		Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
			1 2 3 4	5 6 7 8 9	10 11 12	13 14	15 16	17 18 19 20	21 22 23 24	25 26 27 28	29 30 31 32	33 34 35 36	37 38 39 40	41 42 43 44	45 46 47 48	49 50 51 52	53 54 55 56	57 58 59 60	61 62 63 64	65 66 67 68	69 70 71 72	73 74 75 76	77 78 79 80
FOREST DEVELOPMENT																							
TOTAL	A	MM		10423	000	25	05	107	235			29	31	28	52	25	64	10	50	15	38		
	B	MM		10423	000	25	05	36	107							7	21	12	43	17	43		
	T	MM		10423	000	25	05	143	342			29	31	28	52	32	85	22	93	32	81		
FOREST PROTECTION																							
Hazard Reduction	A	(1000's) Acres		10422	300	25	05	29	16			29	16										
	B	(1000's) Acres		10422	300	25	05																
	T	(1000's) Acres		10422	300	25	05	29	16			29	16										
Fire Breaks		Miles		10422	400	25	05																
Cooperative Studies				10422	350	25	05																
Contract Protection		Acres		10422	400	25	05																
Program Services	A	MM		10422	100	25	05	1	1			1	1										
	B	MM		10422	100	25	05																
	T	MM		10422	100	25	05	1	1			1	1										
TOTAL	A	MM		10422	000	25	05	1	17			1	17										
	B	MM		10422	000	25	05																
	T	MM		10422	000	25	05	1	17			1	17										

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PROJECT SCHEDULE

FOREST MANAGEMENT, DEVELOPMENT & PROTECTION

Project Name: SACAJAWEA

Project Feature	Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
TOTAL - Forest Management A Development & Protection	MM		10400	000	25	05	523	612			123	139	123	138	106	130	83	108	88	97		
B	MM		10400	000	25	05	102	166			2	2	2	2	19	32	42	72	37	58		
T	MM		10400	000	25	05	625	778			125	141	125	140	125	162	125	180	125	155		

| Sample Number | Date | Coolant Temp | Pressure | Coolant Flow | MR330 | MR350 | Total Time | Total Cycles | Time Since Start | Cycles Since Start | Time Since Last | Cycles Since Last | Time Since Last | Cycles Since Last | Time Since Last | Cycles Since Last

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PROJECT SCHEDULE

CADASTRAL SURVEY

Project Name: SACAJAWEA

Project Feature	Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
Cadastral Survey - Lands	(1000's) Acres		1050	020	25	90	9	123			6	8	12	16	18	25	24	41	30	41		
Cadastral Survey - Minerals	(1000's) Acres		1050	030	25	90	63	75			4	5	9	10	12	15	17	20	21	25		
Cadastral Survey - Range	(1000's) Acres		1050	040	25	90	388	461			26	31	52	62	77	92	103	123	130	153		
Cadastral Survey - Forestry	(1000's) Acres		1050	050	25	90	110	132			7	9	15	18	22	26	29	35	37	44		
Cadastral Survey - Other	(1000's) Acres		1050	060	25	90	126	192			8	13	17	26	25	38	34	51	42	64		
TOTAL	(1000's) Acres		1050	000	25	90	777	983			51	66	105	132	154	196	207	262	260	327		

Station Name	Date	Total Coliform (1000/1)	Fecal Coliform (1000/1)	Fecal Strep (1000/1)	Chloride (mg/l)	Nitrate (mg/l)	Nitrite (mg/l)	Ammonia (mg/l)	Total Phosphorus (mg/l)	Ortho Phosphate (mg/l)	Turbidity (NTU)	Color (Pt-Co)	Conductivity (umhos/cm)	Dissolved Oxygen (mg/l)	Temperature (°C)	pH
Cedarvale Park - Creek																
Cedarvale Park - Pond																
Cedarvale Park - Pond Bottom																
Cedarvale Park - Pond Inlet																
Cedarvale Park - Pond Outlet																
Cedarvale Park - Pond Surface																
Cedarvale Park - Pond Surface + Inlet																
Cedarvale Park - Pond Surface + Outlet																
Cedarvale Park - Pond Surface + Pond Bottom																
Cedarvale Park - Pond Surface + Pond Inlet																
Cedarvale Park - Pond Surface + Pond Outlet																
Cedarvale Park - Pond Surface + Pond Surface																
Cedarvale Park - Pond Surface + Pond Surface + Inlet																
Cedarvale Park - Pond Surface + Pond Surface + Outlet																
Cedarvale Park - Pond Surface + Pond Surface + Pond Bottom																
Cedarvale Park - Pond Surface + Pond Surface + Pond Inlet																
Cedarvale Park - Pond Surface + Pond Surface + Pond Outlet																
Cedarvale Park - Pond Surface + Pond Surface + Pond Surface																
Cedarvale Park - Pond Surface + Pond Surface + Pond Surface + Inlet																
Cedarvale Park - Pond Surface + Pond Surface + Pond Surface + Outlet																
Cedarvale Park - Pond Surface + Pond Surface + Pond Surface + Pond Bottom																
Cedarvale Park - Pond Surface + Pond Surface + Pond Surface + Pond Inlet																
Cedarvale Park - Pond Surface + Pond Surface + Pond Surface + Pond Outlet																
Cedarvale Park - Pond Surface + Pond Surface + Pond Surface + Pond Surface																

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PROJECT SCHEOULE

Project Name: SACAJAWEA

LANDS & MINERALS MANAGEMENT AND RECREATION PLANNING

Project Feature	Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
LANDS																						
Land Tenure Analysis	(1000's) Acres		1021	400	25	90	432	200			85	49	99	38	89	38	87	38	72	37		
Recreation Planning	Projects		1022	500	25	90	140	90			4	20	16	18	30	17	40	17	50	18		
Program Services	MM		1022	100	25	90	35	35			7	7	7	7	7	7	7	7	7	7		
TOTAL	MM		1022	000	25	90	420	325			84	76	84	63	84	62	84	62	84	62		
MINERALS																						
Mineral Resource Inventory A	(1000's) Acres		1022	700	25	90	1008	11			145	1	430	4	430	4	1	1	2	1		
Mineral Resource Inventory B	(1000's) Acres		1022	700	25	90	285	4			285	3							1	1		
TOTAL	Man Months		1022	700	25	90	26	15			8	4	8	4	8	4	1	1	1	2		
Program Services	Man Months		1022	100	25	90																
TOTAL	Man Months		1022	000	25	90	26	15			8	4	8	4	8	4	1	1	1	2		
Recreation Lands & Minerals Combined	Man Months		1020	000	25	90	446	340			92	80	92	67	92	66	85	63	85	64		

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PROJECT SCHEDULE

Project Name: SACAJAWEA

CONSTRUCTION AND MAINTENANCE OF ROADS, BUILDING AND RECREATION FACILITIES

Project Feature: CONSTRUCTION, ROADS	Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
		1 2 3 4	5 6 7 8 9	10 11 12	13 14	15 16	17 18 19 20	21 22 23 24	25 26 27 28	29 30 31 32	33 34 35 36	37 38 39 40	41 42 43 44	45 46 47 48	49 50 51 52	53 54 55 56	57 58 59 60	61 62 63 64	65 66 67 68	69 70 71 72	73 74 75 76	77 78 79 80
Survey and Design	Man Months		20100	200	25	05	338	211			87	57	75	44	75	45	75	45	26	20		
Access and Acquisition	Man Months		20100	300	25	05	60	84			12	18	12	17	12	21	12	15	12	13		
Construction	Miles		20100	410	25	05	1052	0755					G-42	6038	S-42 G-16	4866	S-16 G-33	5136	S-33 G-14	4195	S-14	55
Appraisal and Purchase	Man Months		20100	500	25	05		15								15						
Program Services	Man Months		20100	100	25	05	15	15			3	3	3	3	3	3	3	3	3	3		
TOTAL	Man Months		20100	000	25	05	1052	2401			102	78	*102	667	*102	570	*102	576	*66	455		55

*Includes man-months of construction supervision personnel.

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PROJECT SCHEDULE

Project Name: SACAJAWEA

CONSTRUCTION AND MAINTENANCE OF ROADS, BUILDING AND RECREATION FACILITIES

Project Feature	Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
CONSTRUCTION, BUILDINGS		1 2 3 4	5 6 7 8 9	10 11 12	13 14	15 16	17 18 19 20	21 22 23 24	25 26 27 28	29 30 31 32	33 34 35 36	37 38 39 40	41 42 43 44	45 46 47 48	49 50 51 52	53 54 55 56	57 58 59 60	61 62 63 64	65 66 67 68	69 70 71 72	73 74 75 76	77 78 79 80
Survey and Design	MM		20200	200			4	2			2	1		2		1						
Construction	Number		20200	420			7	136			3	115		4		21						
Appraisal and Purchase	MM		20200	500			1	4			1	4										
Program Services	MM		20200	100																		
TOTAL	MM		20200	000			5	142			3	120		2		22						

SACRAMENTO

CONSTRUCTION AND MAINTENANCE OF STATE HIGHWAYS AND BRIDGES AND FERRY AND TERMINAL FACILITIES

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PROJECT SCHEDULE

Project Name: SACAJAWEA

CONSTRUCTION AND MAINTENANCE OF ROADS, BUILDING AND RECREATION FACILITIES

Project Feature: CONSTRUCTION, RECREATION FACILITIES	Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
		1 2 3 4	5 6 7 8 9	10 11 12	13 14	15 16	17 18 19 20	21 22 23 24	25 26 27 28	29 30 31 32	33 34 35 36	37 38 39 40	41 42 43 44	45 46 47 48	49 50 51 52	53 54 55 56	57 58 59 60	61 62 63 64	65 66 67 68	69 70 71 72	73 74 75 76	77 78 79 80
Survey and Design	Man Months		2 0 3 0 0	2 0 0	2 5	0 5	8 8	5 2			2 7	1 7	1 9	1 0	2 0	1 1	1 1	7	1 1	7		
Access and Acquisition	Man Months		2 0 3 0 0	3 0 0	2 5	0 5	7	1 1			5	1 0	2	1								
Construction	Sites		2 0 3 0 0	4 3 0	2 5	0 5	9	2 8 9					4	16 8	1	3 9	2	3 0	2	5 2		
Appraisal and Purchase	Man Months		2 0 3 0 0	5 0 0	2 5	0 5																
Program Services	Man Months		2 0 3 0 0	1 0 0	2 5	0 5	1 0	5			2	1	2	1	2	1	2	1	2	1		
TOTAL	Man Months		2 0 3 0 0	0 0 0	2 5	0 5	1 0 5	3 5 7			3 4	2 8	2 3	1 8 0	2 2	5 1	1 3	3 8	1 3	6 0		
TOTAL Construction	Man Months		2 0 0 0 0	0 0 0	2 5	0 5	2 1 5	2 9 0 0			1 3 9	2 2 6	1 2 7	8 6 9	1 2 4	6 2 1	1 1 5	6 1 4	7 9	5 1 5		5 5

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PROJECT SCHEDULE

Project Name: SACAJAWEA

CONSTRUCTION AND MAINTENANCE OF ROADS, BUILDING AND RECREATION FACILITIES

Project Feature: MAINTENANCE OF ROADS	Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
		1 2 3 4	5 6 7 8 9	10 11 12	13 14	15 16	17 18 19 20	21 22 23 24	25 26 27 28	29 30 31 32	33 34 35 36	37 38 39 40	41 42 43 44	45 46 47 48	49 50 51 52	53 54 55 56	57 58 59 60	61 62 63 64	65 66 67 68	69 70 71 72	73 74 75 76	77 78 79 80
Condition, Survey and Plans	Miles		10700	200	25		191	4							42	1	58	1	91	2		
Maintenance Work	Miles		10700	300	25		191	76							42	16	58	23	91	37		
Studies and Analyses	MM		10700	400	25			1														
Program Services	MM		10700	1000	25		1	6			1	1	1	1	1	1	1	1	1	1		
TOTAL	MM		10700	0000	25		*10	86			1	1	1	1	*2	18	*2	25	*3	40		

*Included man-month engineer under Condition Survey and Plans (Code 200)

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BUREAU OF LAND MANAGEMENT

Project Name: SACAJAWEA

PROJECT SCHEDULE

CONSTRUCTION AND MAINTENANCE OF ROADS, BUILDING AND RECREATION FACILITIES

Project Feature	Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
MAINTENANCE OF BUILDINGS		1 2 3 4	5 6 7 8 9	10 11 12	13 14	15 16	17 18 19 20	21 22 23 24	25 26 27 28	29 30 31 32	33 34 35 36	37 38 39 40	41 42 43 44	45 46 47 48	49 50 51 52	53 54 55 56	57 58 59 60	61 62 63 64	65 66 67 68	69 70 71 72	73 74 75 76	77 78 79 80
Condition, Survey and Plans	MM		10920	200	25	05	5	5			1	1	1	1	1	1	1	1	1	1		
Maintenance Work	Number		10920	300	25	05	10	97			7		1	13	2	23	3	26	4	28		
Studies and Analyses	MM		10920	400	25	05																
Program Services	MM		10920	100	25	05																
TOTAL	MM		10920	000	25	05	*35	102			*7	8	*7	14	*7	24	*7	27	*7	29		

*Include 6 man-months of Wage Board employee under Maintenance Work (Code 300)

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BUREAU OF LAND MANAGEMENT

PROJECT SCHEDULE

Project Name: SACAJAWEA

CONSTRUCTION AND MAINTENANCE OF ROADS, BUILDING AND RECREATION FACILITIES

Project Feature	Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
MAINTENANCE OF RECREATION FACILITIES		1 2 3 4	5 6 7 8 9	10 11 12	13 14	15 16	17 18 19 20	21 22 23 24	25 26 27 28	29 30 31 32	33 34 35 36	37 38 39 40	41 42 43 44	45 46 47 48	49 50 51 52	53 54 55 56	57 58 59 60	61 62 63 64	65 66 67 68	69 70 71 72	73 74 75 76	77 78 79 80
Condition, Survey and Plans	MM		1 0 9 1 0	2 0 0	2 5	0 5																
Maintenance Work	Number		1 0 9 1 0	3 0 0	2 5	0 5		2 0				4		4		4		4		4		
Studies and Analyses	MM		1 0 9 1 0	4 0 0	2 5	0 5																
Program Services	MM		1 0 9 1 0	1 0 0	2 5	0 5																
TOTAL	MM		1 0 9 1 0	0 0 0	2 5	0 5	*3 0	2 0			*6	4	*6	4	*6	4	*6	4	*6	4		
TOTAL, Maintenance	MM			0 0 0	2 5	0 5	7 5	2 0 8			1 4	1 3	1 4	1 9	1 5	4 6	1 5	5 6	1 6	7 3		
TOTAL, Construction and Maintenance of Roads, Building and Recreation Facilities	MM			0 0 0			2 9 0 3	1 0 8			1 5 3	2 3 9	1 4 1	8 8 8	1 3 9	6 6 7	1 3 0	6 7 0	9 5	5 8 8		

*Includes 6 man-months of Wage Board employee under Maintenance Work (Code 300)

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UNITED STATES
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BUREAU OF LAND MANAGEMENT

PROJECT SCHEDULE

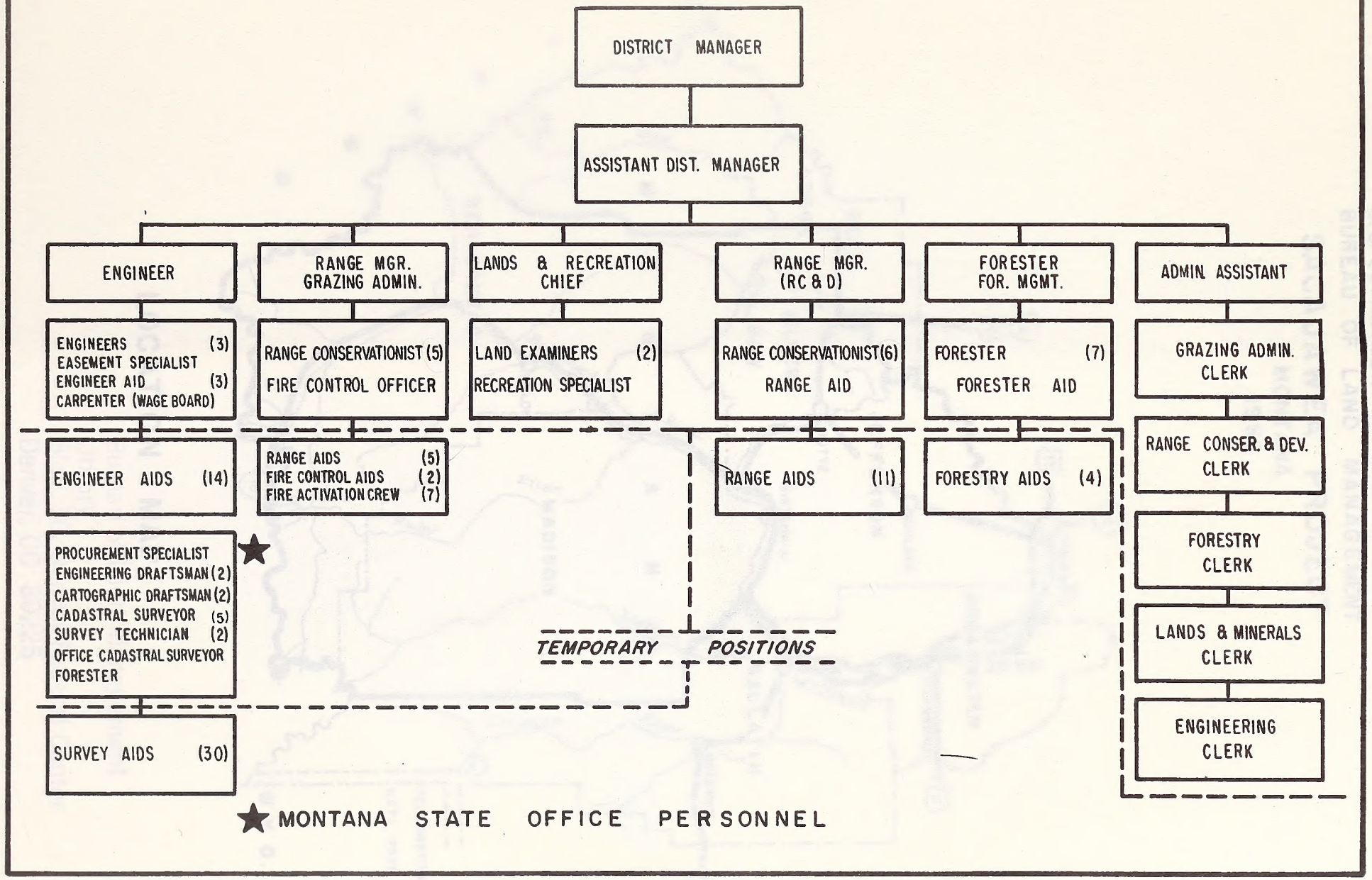
Project Name: SACAJAWEA

GENERAL ADMINISTRATION

Project Feature	Unit	Control Field	Activity	Work Code	State	Office	Total Units	Total Cost ($1000)	Prior Years Units	Prior Years Cost ($1000)	Fiscal Year 64 Units	Fiscal Year 64 Cost ($1000)	Fiscal Year 65 Units	Fiscal Year 65 Cost ($1000)	Fiscal Year 66 Units	Fiscal Year 66 Cost ($1000)	Fiscal Year 67 Units	Fiscal Year 67 Cost ($1000)	Fiscal Year 68 Units	Fiscal Year 68 Cost ($1000)	Balance to Complete Units	Balance to Complete Cost ($1000)
General Administration			1010000	000	25	05		175				34		35		36		35		35		
TOTAL BY APPROPRIATIONS																						
Management of Lands & Resources			10000		25	05		6022				1175		1600		1117		1110		1020		
Construction			20000		25	05		2900				236		830		720		616		498		
O & C Land Grants			50000		25	05																
Range Improvement			80000		25	05		40				8		8		8		8		8		
PROJECT GRAND TOTAL	MM						4665896 2				7501419		1460243 8		835184 5		820173 4		800152 6			

Entreprise	Siret	Capital	Activité	Code NAF	Effectif	Année	Chiffre d'affaires	Résultat net	Année	Chiffre d'affaires	Résultat net	Année	Chiffre d'affaires	Résultat net
Comptoir Méditerranéen du Liège	312 456 789 00014	150 000	Bouchons et granulés	2312Z	18	2021	1 240 000	86 000	2022	1 385 000	97 500	2023	1 512 000	104 200
Atelier du Tranchoir	418 902 345 00021	40 000	Découpe manuelle	2312Z	4	2021	310 000	18 000	2022	342 000	21 000	2023	365 000	22 500
Forêts & Bouchons SARL	501 234 678 00032	75 000	Sylviculture	0220Z	9	2021	720 000	41 000	2022	790 000	46 000	2023	845 000	49 000
Coopérative Suberaie	623 789 012 00045	200 000	Collecte	0220Z	22	2021	1 980 000	120 000	2022	2 150 000	132 000	2023	2 310 000	141 000
Liège Traitement	734 567 890 00058	90 000	Traitement thermique	2312Z	11	2021	980 000	55 000	2022	1 060 000	61 000	2023	1 120 000	64 000
Maison Rouvière	845 123 456 00067	30 000	Commerce détail	4778C	3	2021	260 000	12 000	2022	275 000	13 500	2023	290 000	14 200
Société Ouest Liège	956 234 567 00074	120 000	Granulés	2312Z	14	2021	1 150 000	72 000	2022	1 240 000	78 000	2023	1 305 000	81 000
Bouchons Prestige	067 345 678 00081	60 000	Bouchons	2312Z	7	2021	540 000	30 000	2022	580 000	33 000	2023	610 000	35 000
Transports Rhône-Liège	178 456 789 00093	100 000	Transport	4941A	16	2021	1 420 000	88 000	2022	1 530 000	95 000	2023	1 610 000	99 000
Scierie du Haut Plateau	289 567 890 00102	250 000	Sciage	1610A	28	2021	2 600 000	150 000	2022	2 780 000	162 000	2023	2 950 000	171 000
Bois & Liège Réunis	390 678 901 00119	180 000	Négoce	4676Z	12	2021	1 050 000	64 000	2022	1 120 000	69 000	2023	1 180 000	72 000
Entrepôt Sud Liège	401 789 012 00126	45 000	Stockage	5210B	5	2021	410 000	22 000	2022	435 000	24 000	2023	460 000	25 500
Ateliers Mécaniques Vallée	512 890 123 00135	300 000	Mécanique	2562B	34	2021	3 200 000	190 000	2022	3 420 000	205 000	2023	3 610 000	218 000
Fonderie Centrale	623 901 234 00142	500 000	Fonderie	2452Z	52	2021	4 800 000	260 000	2022	5 100 000	280 000	2023	5 350 000	295 000
Usinage Précision	734 012 345 00159	220 000	Usinage	2562B	21	2021	1 950 000	110 000	2022	2 080 000	118 000	2023	2 190 000	124 000
Outillage Moderne	845 123 456 00167	80 000	Outillage	2562B	8	2021	720 000	38 000	2022	760 000	41 000	2023	795 000	43 000
Soudure Industrielle	956 234 567 00174	110 000	Soudure	2562B	10	2021	880 000	46 000	2022	930 000	50 000	2023	975 000	53 000
Société Métallurgique Nord	067 345 678 00181	400 000	Métallurgie	2410Z	40	2021	3 900 000	210 000	2022	4 150 000	228 000	2023	4 380 000	241 000
Tôlerie Fine	178 456 789 00193	150 000	Tôlerie	2562B	15	2021	1 400 000	78 000	2022	1 490 000	84 000	2023	1 560 000	88 000
Chaudronnerie Générale	289 567 890 00202	260 000	Chaudronnerie	2562B	24	2021	2 300 000	130 000	2022	2 450 000	140 000	2023	2 580 000	148 000
Atelier Mécanique Rhône	390 678 901 00219	90 000	Mécanique	2562B	9	2021	810 000	42 000	2022	860 000	46 000	2023	905 000	48 500
Fonderie du Sud	401 789 012 00226	600 000	Fonderie	2452Z	60	2021	5 500 000	300 000	2022	5 850 000	322 000	2023	6 150 000	340 000
Usinage & Outillage	512 890 123 00235	140 000	Usinage	2562B	13	2021	1 200 000	66 000	2022	1 280 000	71 000	2023	1 350 000	75 000
Métallurgie Appliquée	623 901 234 00242	350 000	Métallurgie	2410Z	36	2021	3 450 000	185 000	2022	3 680 000	200 000	2023	3 880 000	212 000
Tôlerie & Chaudronnerie	734 012 345 00259	200 000	Tôlerie	2562B	19	2021	1 750 000	95 000	2022	1 860 000	102 000	2023	1 960 000	108 000
Soudure & Montage	845 123 456 00267	70 000	Soudure	2562B	7	2021	640 000	32 000	2022	680 000	35 000	2023	715 000	37 000
Ateliers Réunis Vallée	956 234 567 00274	180 000	Mécanique	2562B	17	2021	1 600 000	88 000	2022	1 700 000	94 000	2023	1 790 000	98 000
Fonderie & Usinage	067 345 678 00281	450 000	Fonderie	2452Z	44	2021	4 100 000	220 000	2022	4 360 000	238 000	2023	4 590 000	252 000
Outillage & Précision	178 456 789 00293	130 000	Outillage	2562B	11	2021	1 020 000	54 000	2022	1 090 000	59 000	2023	1 150 000	63 000
Métallurgie du Nord	289 567 890 00302	320 000	Métallurgie	2410Z	30	2021	2 900 000	155 000	2022	3 080 000	168 000	2023	3 240 000	178 000
Tôlerie Générale	390 678 901 00319	160 000	Tôlerie	2562B	14	2021	1 300 000	70 000	2022	1 380 000	76 000	2023	1 450 000	80 000
Chaudronnerie & Soudure	401 789 012 00326	240 000	Chaudronnerie	2562B	20	2021	1 850 000	100 000	2022	1 970 000	108 000	2023	2 070 000	114 000
Atelier Mécanique Sud	512 890 123 00335	95 000	Mécanique	2562B	8	2021	740 000	38 000	2022	790 000	42 000	2023	830 000	44 000
Fonderie Rhône-Liège	623 901 234 00342	700 000	Fonderie	2452Z	70	2021	6 400 000	350 000	2022	6 800 000	374 000	2023	7 150 000	395 000
Usinage Précision Vallée	734 012 345 00359	190 000	Usinage	2562B	16	2021	1 500 000	82 000	2022	1 600 000	88 000	2023	1 680 000	93 000
Outillage & Montage	845 123 456 00367	85 000	Outillage	2562B	9	2021	820 000	44 000	2022	870 000	48 000	2023	915 000	50 500
Métallurgie & Fonderie	956 234 567 00374	380 000	Métallurgie	2410Z	38	2021	3 650 000	198 000	2022	3 880 000	214 000	2023	4 080 000	226 000
Tôlerie & Soudure	067 345 678 00381	210 000	Tôlerie	2562B	18	2021	1 680 000	90 000	2022	1 790 000	98 000	2023	1 880 000	104 000
Chaudronnerie Générale	178 456 789 00393	270 000	Chaudronnerie	2562B	25	2021	2 400 000	135 000	2022	2 550 000	146 000	2023	2 680 000	154 000
Atelier Mécanique Nord	289 567 890 00402	110 000	Mécanique	2562B	10	2021	920 000	48 000	2022	980 000	53 000	2023	1 030 000	56 000
Fonderie & Outillage	390 678 901 00419	650 000	Fonderie	2452Z	65	2021	5 900 000	320 000	2022	6 270 000	344 000	2023	6 590 000	364 000
Usinage & Montage	401 789 012 00426	170 000	Usinage	2562B	15	2021	1 380 000	75 000	2022	1 470 000	81 000	2023	1 550 000	86 000
Métallurgie Générale	512 890 123 00435	330 000	Métallurgie	2410Z	32	2021	3 050 000	165 000	2022	3 240 000	178 000	2023	3 410 000	188 000
Tôlerie & Montage	623 901 234 00442	195 000	Tôlerie	2562B	17	2021	1 580 000	85 000	2022	1 680 000	92 000	2023	1 770 000	98 000
Chaudronnerie & Montage	734 012 345 00459	255 000	Chaudronnerie	2562B	23	2021	2 200 000	124 000	2022	2 340 000	134 000	2023	2 460 000	141 000
Atelier Mécanique Vallée	845 123 456 00467	105 000	Mécanique	2562B	9	2021	860 000	45 000	2022	910 000	49 000	2023	960 000	52 000
Fonderie & Montage	956 234 567 00474	620 000	Fonderie	2452Z	62	2021	5 600 000	305 000	2022	5 950 000	327 000	2023	6 250 000	345 000
Usinage & Outillage	067 345 678 00481	185 000	Usinage	2562B	16	2021	1 500 000	82 000	2022	1 600 000	88 000	2023	1 680 000	93 000
Métallurgie & Montage	178 456 789 00493	360 000	Métallurgie	2410Z	35	2021	3 350 000	182 000	2022	3 560 000	196 000	2023	3 740 000	207 000
Tôlerie & Outillage	289 567 890 00502	205 000	Tôlerie	2562B	18	2021	1 680 000	90 000	2022	1 790 000	98 000	2023	1 880 000	104 000
Chaudronnerie & Outillage	390 678 901 00519	265 000	Chaudronnerie	2562B	24	2021	2 300 000	130 000	2022	2 450 000	140 000	2023	2 580 000	148 000
Atelier Mécanique Centre	401 789 012 00526	115 000	Mécanique	2562B	10	2021	920 000	48 000	2022	980 000	53 000	2023	1 030 000	56 000
Fonderie & Usinage	512 890 123 00535	640 000	Fonderie	2452Z	64	2021	5 800 000	315 000	2022	6 160 000	338 000	2023	6 470 000	357 000
Usinage & Montage	623 901 234 00542	175 000	Usinage	2562B	15	2021	1 380 000	75 000	2022	1 470 000	81 000	2023	1 550 000	86 000
Métallurgie & Outillage	734 012 345 00559	340 000	Métallurgie	2410Z	33	2021	3 150 000	170 000	2022	3 340 000	183 000	2023	3 510 000	193 000
Tôlerie & Montage	845 123 456 00567	200 000	Tôlerie	2562B	17	2021	1 580 000	85 000	2022	1 680 000	92 000	2023	1 770 000	98 000
Chaudronnerie & Montage	956 234 567 00574	260 000	Chaudronnerie	2562B	23	2021	2 200 000	124 000	2022	2 340 000	134 000	2023	2 460 000	141 000
Atelier Mécanique Vallée	067 345 678 00581	100 000	Mécanique	2562B	9	2021	860 000	45 000	2022	910 000	49 000	2023	960 000	52 000
Fonderie & Montage	178 456 789 00593	630 000	Fonderie	2452Z	62	2021	5 600 000	305 000	2022	5 950 000	327 000	2023	6 250 000	345 000
Usinage & Outillage	289 567 890 00602	180 000	Usinage	2562B	16	2021	1 500 000	82 000	2022	1 600 000	88 000	2023	1 680 000	93 000
Métallurgie & Montage	390 678 901 00619	350 000	Métallurgie	2410Z	35	2021	3 350 000	182 000	2022	3 560 000	196 000	2023	3 740 000	207 000
Tôlerie & Outillage	401 789 012 00626	210 000	Tôlerie	2562B	18	2021	1 680 000	90 000	2022	1 790 000	98 000	2023	1 880 000	104 000
Chaudronnerie & Outillage	512 890 123 00635	270 000	Chaudronnerie	2562B	24	2021	2 300 000	130 000	2022	2 450 000	140 000	2023	2 580 000	148 000
Atelier Mécanique Centre	623 901 234 00642	120 000	Mécanique	2562B	10	2021	920 000	48 000	2022	980 000	53 000	2023	1 030 000	56 000
Fonderie & Usinage	734 012 345 00659	660 000	Fonderie	2452Z	64	2021	5 800 000	315 000	2022	6 160 000	338 000	2023	6 470 000	357 000
Usinage & Montage	845 123 456 00667	180 000	Usinage	2562B	15	2021	1 380 000	75 000	2022	1 470 000	81 000	2023	1 550 000	86 000
Métallurgie & Outillage	956 234 567 00674	350 000	Métallurgie	2410Z	33	2021	3 150 000	170 000	2022	3 340 000	183 000	2023	3 510 000	193 000
Tôlerie & Montage	067 345 678 00681	205 000	Tôlerie	2562B	17	2021	1 580 000	85 000	2022	1 680 000	92 000	2023	1 770 000	98 000
Chaudronnerie & Montage	178 456 789 00693	265 000	Chaudronnerie	2562B	23	2021	2 200 000	124 000	2022	2 340 000	134 000	2023	2 460 000	141 000
Atelier Mécanique Vallée	289 567 890 00702	105 000	Mécanique	2562B	9	2021	860 000	45 000	2022	910 000	49 000	2023	960 000	52 000
Fonderie & Montage	390 678 901 00719	640 000	Fonderie	2452Z	62	2021	5 600 000	305 000	2022	5 950 000	327 000	2023	6 250 000	345 000
Usinage & Outillage	401 789 012 00726	185 000	Usinage	2562B	16	2021	1 500 000	82 000	2022	1 600 000	88 000	2023	1 680 000	93 000
Métallurgie & Montage	512 890 123 00735	360 000	Métallurgie	2410Z	35	2021	3 350 000	182 000	2022	3 560 000	196 000	2023	3 740 000	207 000
Tôlerie & Outillage	623 901 234 00742	210 000	Tôlerie	2562B	18	2021	1 680 000	90 000	2022	1 790 000	98 000	2023	1 880 000	104 000
Chaudronnerie & Outillage	734 012 345 00759	270 000	Chaudronnerie	2562B	24	2021	2 300 000	130 000	2022	2 450 000	140 000	2023	2 580 000	148 000
Atelier Mécanique Centre	845 123 456 00767	120 000	Mécanique	2562B	10	2021	920 000	48 000	2022	980 000	53 000	2023	1 030 000	56 000
Fonderie & Usinage	956 234 567 00774	660 000	Fonderie	2452Z	64	2021	5 800 000	315 000	2022	6 160 000	338 000	2023	6 470 000	357 000
Usinage & Montage	067 345 678 00781	180 000	Usinage	2562B	15	2021	1 380 000	75 000	2022	1 470 000	81 000	2023	1 550 000	86 000
Métallurgie & Outillage	178 456 789 00793	350 000	Métallurgie	2410Z	33	2021	3 150 000	170 000	2022	3 340 000	183 000	2023	3 510 000	193 000
Tôlerie & Montage	289 567 890 00802	205 000	Tôlerie	2562B	17	2021	1 580 000	85 000	2022	1 680 000	92 000	2023	1 770 000	98 000
Chaudronnerie & Montage	390 678 901 00819	265 000	Chaudronnerie	2562B	23	2021	2 200 000	124 000	2022	2 340 000	134 000	2023	2 460 000	141 000
Atelier Mécanique Vallée	401 789 012 00826	105 000	Mécanique	2562B	9	2021	860 000	45 000	2022	910 000	49 000	2023	960 000	52 000
Fonderie & Montage	512 890 123 00835	640 000	Fonderie	2452Z	62	2021	5 600 000	305 000	2022	5 950 000	327 000	2023	6 250 000	345 000
Usinage & Outillage	623 901 234 00842	185 000	Usinage	2562B	16	2021	1 500 000	82 000	2022	1 600 000	88 000	2023	1 680 000	93 000
Métallurgie & Montage	734 012 345 00859	360 000	Métallurgie	2410Z	35	2021	3 350 000	182 000	2022	3 560 000	196 000	2023	3 740 000	207 000
Tôlerie & Outillage	845 123 456 00867	210 000	Tôlerie	2562B	18	2021	1 680 000	90 000	2022	1 790 000	98 000	2023	1 880 000	104 000
Chaudronnerie & Outillage	956 234 567 00874	270 000	Chaudronnerie	2562B	24	2021	2 300 000	130 000	2022	2 450 000	140 000	2023	2 580 000	148 000
Atelier Mécanique Centre	067 345 678 00881	120 000	Mécanique	2562B	10	2021	920 000	48 000	2022	980 000	53 000	2023	1 030 000	56 000
Fonderie & Usinage	178 456 789 00893	660 000	Fonderie	2452Z	64	2021	5 800 000	315 000	2022	6 160 000	338 000	2023	6 470 000	357 000
Usinage & Montage	289 567 890 00902	180 000	Usinage	2562B	15	2021	1 380 000	75 000	2022	1 470 000	81 000	2023	1 550 000	86 000
Métallurgie & Outillage	390 678 901 00919	350 000	Métallurgie	2410Z	33	2021	3 150 000	170 000	2022	3 340 000	183 000	2023	3 510 000	193 000
Tôlerie & Montage	401 789 012 00926	205 000	Tôlerie	2562B	17	2021	1 580 000	85 000	2022	1 680 000	92 000	2023	1 770 000	98 000
Chaudronnerie & Montage	512 890 123 00935	265 000	Chaudronnerie	2562B	23	2021	2 200 000	124 000	2022	2 340 000	134 000	2023	2 460 000	141 000
Atelier Mécanique Vallée	623 901 234 00942	105 000	Mécanique	2562B	9	2021	860 000	45 000	2022	910 000	49 000	2023	960 000	52 000
Fonderie & Montage	734 012 345 00959	640 000	Fonderie	2452Z	62	2021	5 600 000	305 000	2022	5 950 000	327 000	2023	6 250 000	345 000
Usinage & Outillage	845 123 456 00967	185 000	Usinage	2562B	16	2021	1 500 000	82 000	2022	1 600 000	88 000	2023	1 680 000	93 000
Métallurgie & Montage	956 234 567 00974	360 000	Métallurgie	2410Z	35	2021	3 350 000	182 000	2022	3 560 000	196 000	2023	3 740 000	207 000
Tôlerie & Outillage	067 345 678 00981	210 000	Tôlerie	2562B	18	2021	1 680 000	90 000	2022	1 790 000	98 000	2023	1 880 000	104 000
Chaudronnerie & Outillage	178 456 789 00993	270 000	Chaudronnerie	2562B	24	2021	2 300 000	130 000	2022	2 450 000	140 000	2023	2 580 000	148 000
Atelier Mécanique Centre	289 567 890 01002	120 000	Mécanique	2562B	10	2021	920 000	48 000	2022	980 000	53 000	2023	1 030 000	56 000
Fonderie & Usinage	390 678 901 01019	660 000	Fonderie	2452Z	64	2021	5 800 000	315 000	2022	6 160 000	338 000	2023	6 470 000	357 000
Usinage & Montage	401 789 012 01026	180 000	Usinage	2562B	15	2021	1 380 000	75 000	2022	1 470 000	81 000	2023	1 550 000	86 000
Métallurgie & Outillage	512 890 123 01035	350 000	Métallurgie	2410Z	33	2021	3 150 000	170 000	2022	3 340 000	183 000	2023	3 510 000	193 000
Tôlerie & Montage	623 901 234 01042	205 000	Tôlerie	2562B	17	2021	1 580 000	85 000	2022	1 680 000	92 000	2023	1 770 000	98 000
Chaudronnerie & Montage	734 012 345 01059	265 000	Chaudronnerie	2562B	23	2021	2 200 000	124 000	2022	2 340 000	134 000	2023	2 460 000	141 000
Atelier Mécanique Vallée	845 123 456 01067	105 000	Mécanique	2562B	9	2021	860 000	45 000	2022	910 000	49 000	2023	960 000	52 000
Fonderie & Montage	956 234 567 01074	640 000	Fonderie	2452Z	62	2021	5 600 000	305 000	2022	5 950 000	327 000	2023	6 250 000	345 000
Usinage & Outillage	067 345 678 01081	185 000	Usinage	2562B	16	2021	1 500 000	82 000	2022	1 600 000	88 000	2023	1 680 000	93 000
Métallurgie & Montage	178 456 789 01093	360 000	Métallurgie	2410Z	35	2021	3 350 000	182 000	2022	3 560 000	196 000	2023	3 740 000	207 000
Tôlerie & Outillage	289 567 890 01102	210 000	Tôlerie	2562B	18	2021	1 680 000	90 000	2022	1 790 000	98 000	2023	1 880 000	104 000
Chaudronnerie & Outillage	390 678 901 01119	270 000	Chaudronnerie	2562B	24	2021	2 300 000	130 000	2022	2 450 000	140 000	2023	2 580 000	148 000
Atelier Mécanique Centre	401 789 012 01126	120 000	Mécanique	2562B	10	2021	920 000	48 000	2022	980 000	53 000	2023	1 030 000	56 000
Fonderie & Usinage	512 890 123 01135	660 000	Fonderie	2452Z	64	2021	5 800 000	315 000	2022	6 160 000	338 000	2023	6 470 000	357 000
Usinage & Montage	623 901 234 01142	180 000	Usinage	2562B	15	2021	1 380 000	75 000	2022	1 470 000	81 000	2023	1 550 000	86 000
Métallurgie & Outillage	734 012 345 01159	350 000	Métallurgie	2410Z	33	2021	3 150 000	170 000	2022	3 340 000	183 000	2023	3 510 000	193 000
Tôlerie & Montage	845 123 456 01167	205 000	Tôlerie	2562B	17	2021	1 580 000	85 000	2022	1 680 000	92 000	2023	1 770 000	98 000
Chaudronnerie & Montage	956 234 567 01174	265 000	Chaudronnerie	2562B	23	2021	2 200 000	124 000	2022	2 340 000	134 000	2023	2 460 000	141 000
Atelier Mécanique Vallée	067 345 678 01181	105 000	Mécanique	2562B	9	2021	860 000	45 000	2022	910 000	49 000	2023	960 000	52 000
Fonderie & Montage	178 456 789 01193	640 000	Fonderie	2452Z	62	2021	5 600 000	305 000	2022	5 950 000	327 000	2023	6 250 000	345 000
Usinage & Outillage	289 567 890 01202	185 000	Usinage	2562B	16	2021	1 500 000	82 000	2022	1 600 000	88 000	2023	1 680 000	93 000
Métallurgie & Montage	390 678 901 01219	360 000	Métallurgie	2410Z	35	2021	3 350 000	182 000	2022	3 560 000	196 000	2023	3 740 000	207 000
Tôlerie & Outillage	401 789 012 01226	210 000	Tôlerie	2562B	18	2021	1 680 000	90 000	2022	1 790 000	98 000	2023	1 880 000	104 000
Chaudronnerie & Outillage	512 890 123 01235	270 000	Chaudronnerie	2562B	24	2021	2 300 000	130 000	2022	2 450 000	140 000	2023	2 580 000	148 000
Atelier Mécanique Centre	623 901 234 01242	120 000	Mécanique	2562B	10	2021	920 000	48 000	2022	980 000	53 000	2023	1 030 000	56 000
Fonderie & Usinage	734 012 345 01259	660 000	Fonderie	2452Z	64	2021	5 800 000	315 000	2022	6 160 000	338 000	2023	6 470 000	357 000
Usinage & Montage	845 123 456 01267	180 000	Usinage	2562B	15	2021	1 380 000	75 000	2022	1 470 000	81 000	2023	1 550 000	86 000
Métallurgie & Outillage	956 234 567 01274	350 000	Métallurgie	2410Z	33	2021	3 150 000	170 000	2022	3 340 000	183 000	2023	3 510 000	193 000
Tôlerie & Montage	067 345 678 01281	205 000	Tôlerie	2562B	17	2021	1 580 000	85 000	2022	1 680 000	92 000	2023	1 770 000	98 000
Chaudronnerie & Montage	178 456 789 01293	265 000	Chaudronnerie	2562B	23	2021	2 200 000	124 000	2022	2 340 000	134 000	2023	2 460 000	141 000
Atelier Mécanique Vallée	289 567 890 01302	105 000	Mécanique	2562B	9	2021	860 000	45 000	2022	910 000	49 000	2023	960 000	52 000
Fonderie & Montage	390 678 901 01319	640 000	Fonderie	2452Z	62	2021	5 600 000	305 000	2022	5 950 000	327 000	2023	6 250 000	345 000
Usinage & Outillage	401 789 012 01326	185 000	Usinage	2562B	16	2021	1 500 000	82 000	2022	1 600 000	88 000	2023	1 680 000	93 000
Métallurgie & Montage	512 890 123 01335	360 000	Métallurgie	2410Z	35	2021	3 350 000	182 000	2022	3 560 000	196 000	2023	3 740 000	207 000
Tôlerie & Outillage	623 901 234 01342	210 000	Tôlerie	2562B	18	2021	1 680 000	90 000	2022	1 790 000	98 000	2023	1 880 000	104 000
Chaudronnerie & Outillage	734 012 345 01359	270 000	Chaudronnerie	2562B	24	2021	2 300 000	130 000	2022	2 450 000	140 000	2023	2 580 000	148 000
Atelier Mécanique Centre	845 123 456 01367	120 000	Mécanique	2562B	10	2021	920 000	48 000	2022	980 000	53 000	2023	1 030 000	56 000
Fonderie & Usinage	956 234 567 01374	660 000	Fonderie	2452Z	64	2021	5 800 000	315 000	2022	6 160 000	338 000	2023	6 470 000	357 000
Usinage & Montage	067 345 678 01381	180 000	Usinage	2562B	15	2021	1 380 000	75 000	2022	1 470 000	81 000	2023	1 550 000	86 000
Métallurgie & Outillage	178 456 789 01393	350 000	Métallurgie	2410Z	33	2021	3 150 000	170 000	2022	3 340 000	183 000	2023	3 510 000	193 000
Tôlerie & Montage	289 567 890 01402	205 000	Tôlerie	2562B	17	2021	1 580 000	85 000	2022	1 680 000	92 000	2023	1 770 000	98 000
Chaudronnerie & Montage	390 678 901 01419	265 000	Chaudronnerie	2562B	23	2021	2 200 000	124 000	2022	2 340 000	134 000	2023	2 460 000	141 000
Atelier Mécanique Vallée	401 789 012 01426	105 000	Mécanique	2562B	9	2021	860 000	45 000	2022	910 000	49 000	2023	960 000	52 000
Fonderie & Montage	512 890 123 01435	640 000	Fonderie	2452Z	62	2021	5 600 000	305 000	2022	5 950 000	327 000	2023	6 250 000	345 000
Usinage & Outillage	623 901 234 01442	185 000	Usinage	2562B	16	2021	1 500 000	82 000	2022	1 600 000	88 000	2023	1 680 000	93 000
Métallurgie & Montage	734 012 345 01459	360 000	Métallurgie	2410Z	35	2021	3 350 000	182 000	2022	3 560 000	196 000	2023	3 740 000	207 000
Tôlerie & Outillage	845 123 456 01467	210 000	Tôlerie	2562B	18	2021	1 680 000	90 000	2022	1 790 000	98 000	2023	1 880 000	104 000
Chaudronnerie & Outillage	956 234 567 01474	270 000	Chaudronnerie	2562B	24	2021	2 300 000	130 000	2022	2 450 000	140 000	2023	2 580 000	148 000
Atelier Mécanique Centre	067 345 678 01481	120 000	Mécanique	2562B	10	2021	920 000	48 000	2022	980 000	53 000	2023	1 030 000	56 000
Fonderie & Usinage	178 456 789 01493	660 000	Fonderie	2452Z	64	2021	5 800 000	315 000	2022	6 160 000	338 000	2023	6 470 000	357 000
Usinage & Montage	289 567 890 01502	180 000	Usinage	2562B	15	2021	1 380 000	75 000	2022	1 470 000	81 000	2023	1 550 000	86 000
Métallurgie & Outillage	390 678 901 01519	350 000	Métallurgie	2410Z	33	2021	3 150 000	170 000	2022	3 340 000	183 000	2023	3 510 000	193 000
Tôlerie & Montage	401 789 012 01526	205 000	Tôlerie	2562B	17	2021	1 580 000	85 000	2022	1 680 000	92 000	2023	1 770 000	98 000
Chaudronnerie & Montage	512 890 123 01535	265 000	Chaudronnerie	2562B	23	2021	2 200 000	124 000	2022	2 340 000	134 000	2023	2 460 000	141 000
Atelier Mécanique Vallée	623 901 234 01542	105 000	Mécanique	2562B	9	2021	860 000	45 000	2022	910 000	49 000	2023	960 000	52 000
Fonderie & Montage	734 012 345 01559	640 000	Fonderie	2452Z	62	2021	5 600 000	305 000	2022	5 950 000	327 000	2023	6 250 000

DILLON DISTRICT ORGANIZATIONAL CHART



MONTANA STATE OFFICE PERSONNEL

DILTON DISTRICT ORGANIZATIONAL CHART

DISTRICT MANAGER

ASSISTANT DIST MANAGER

CLERK
ENGINEERING

CLERK
LANDS & MINERALS

CLERK
FORESTRY

CLERK
RANGE CONSERV & DEV

ADMIN ASSISTANT

CLERK
CADASTRAL SURVEY

FORESTER
FOR MGM'T

FORESTER AID
FORESTRY (1)

RANGE AID (1)

RANGE AIDS (2)

FORESTRY AIDS (2)

RANGE CONSERVATIONIST(S)

RANGE MGM'T

LAND EXAMINER (2)

RECREATION SPECIALIST

CHIEF
SURVEYS & RECREATION

RANGE MGM'T

FIRE CONTROL OFFICER

GRAZING ADMIN

FIRE FOREMAN (1)
FIRE CONTROL AIDS (5)
RANGE AIDS (6)

ENGINEERING AIDS (4)

ENGINEER AID
EQUIPMENT OPERATOR (1)

CHIEF ENGINEER (NAVE BOARD) (1)
ENGINEERS (3)

ENGINEERS

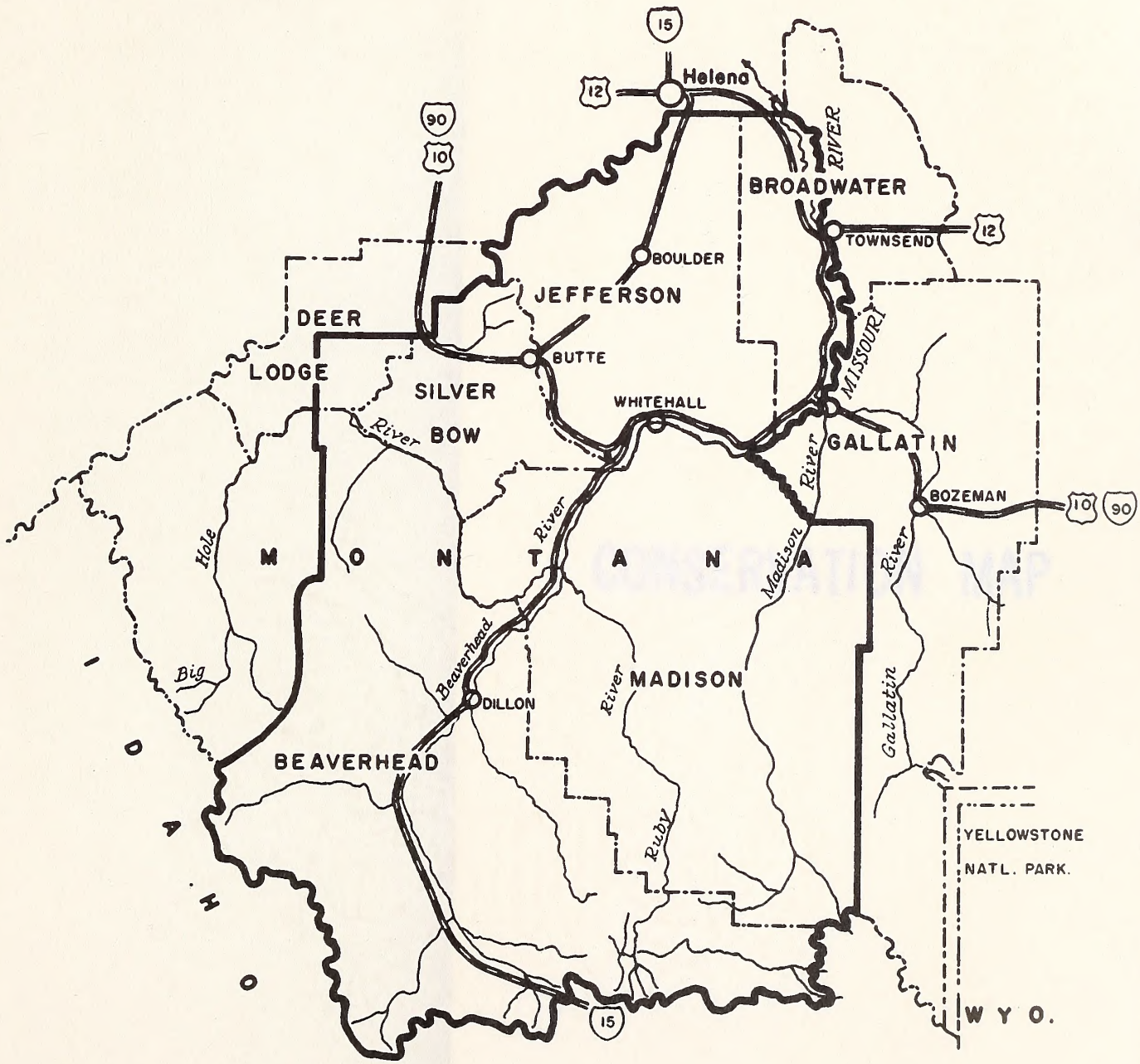
FORESTER
OFFICE COORDINATOR STUDENT
SMALL TECHNICIAN (2)
CARTOGRAPHIC DRAFTSMAN (1)
ENGINEERING DRAFTSMAN (1)
PHOTOGRAMMETRIST (1)

SURVEY AIDS (20)

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SACAJAWEA PROJECT

MONTANA
1962



LOCATION MAP

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CONSTRUCTION MAP
OF SACAJAWEA PROJECT
BOULDER RIVER CAMP GROUND
BIG HOLE RIVER CAMP GROUND
BIG HOLE RIVER PICNIC SITE
MADISON ISLAND CAMP GROUND
MADISON RIVER BRIDGE RECREATION AREA
TRAIL CONSTRUCTION 1968
MADISON RIVER BRIDGE RECREATION AREA
HEARTHEY MTN. TIMBER & FIRE ACCESS ROAD
RUBY MTN. TIMBER ACCESS ROAD
RUBY RESERVOIR CAMP GROUND
KENNY LAKE LAUNCH SITE
MADISON RIVER
"UNIT B"
BLACK CANYON CREEK TIMBER ACCESS ROAD (FS)
LAWRENCE BASIN TIMBER ACCESS ROAD (FS)
PRICE CREEK TIMBER ACCESS ROAD
JONES CREEK TIMBER ACCESS ROAD
COEL CREEK TIMBER ACCESS ROAD
SACAJAWEA PROJECT
CONSTRUCTION MAP

RECONNAISSANCE MINERAL RESOURCE MAP OF SACAJAWEA PROJECT

Showing Approximate Mineral Resource Areas and Distribution of Principal Metallic and Non-Metallic Mineral Resources

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U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
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MONTANA
1975

MINERAL RESOURCE MAP

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Sacajawea Project.

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